

CITY OF CELINA, TEXAS ORDINANCE NO. 2019-09

AN ORDINANCE OF THE CITY OF CELINA, TEXAS AMENDING THE CITY'S CODE OF ORDINANCES; CHAPTER 3: BUILDING REGULATIONS; DIVISION 1 GENERALLY SECTION 3.02.001 ENFORCEMENT; ADD SECTION 3.02.003 ADOPTION BY REFERENCE; DIVISION 2 BUILDING CODE; SECTION 3.02.051 INTERNATIONAL BUILDING CODE WITH AMENDMENTS; DIVISION 3 FIRE CODE; SECTION 3.02.101 INTERNATIONAL FIRE CODE WITH AMENDMENTS; DIVISION 4 RESIDENTIAL CODE; SECTION 3.02.151 INTERNATIONAL RESIDENTIAL CODE WITH AMENDMENTS; DIVISION 5 MECHANICAL CODE; SECTION 3.02.201 INTERNATIONAL MECHANICAL CODE WITH AMENDMENTS; DIVISION 6 FUEL GAS CODE; SECTION 3.02.251 INTERNATIONAL FUEL GAS CODE WITH AMENDMENTS; DIVISION 7 PLUMBING CODE; SECTION 3.02.301 INTERNATIONAL PLUMBING CODE WITH AMENDMENTS; DIVISION 8 NATIONAL ELECTRICAL CODE; SECTION 3.02.351 NATIONAL ELECTRIC CODE WITH AMENDMENTS; DIVISION 9 ENERGY CONSERVATION CODE; SECTION 3.02.401 INTERNATIONAL ENERGY CONSERVATION CODE WITH AMENDMENTS; DIVISION 10 PROPERTY MAINTENANCE CODE; SECTION 3.02.451 INTERNATIONAL PROPERTY MAINTENANCE CODE WITH AMENDMENTS; DIVISION 11 SWIMMING POOL AND SPA CODE; SECTION 3.02.501 INTERNATIONAL SWIMMING POOL SPA CODE WITH AMENDMENTS; DIVISION 12 EXISTING BUILDING CODE; SECTION 3.02.551 INTERNATIONAL EXISTING BUILDING CODE WITH AMENDMENTS; DIVISION 13 STORM SHELTER CODE; SECTION 3.02.601 INTERNATIONAL CODE COUNCIL – NATIONAL STORM SHELTER ASSOCIATION 500 CODE WITH AMENDMENTS; PROVIDING A CUMULATIVE REPEALER CLAUSE; PROVIDING SEVERABILITY; PROVIDING FOR SAVINGS; PROVIDING FOR A PENALTY NOT TO EXCEED \$2,000.00 AND A SEPARATE OFFENSE SHALL BE DEEMED COMMITTED EACH DAY DURING OR ON WHICH A VIOLATION OCCURS OR CONTINUES AND INCLUDING PROVISIONS FOR THE AUTHORIZATION TO SEEK INJUNCTIVE RELIEF TO ENJOIN VIOLATIONS WHICH CONSTITUTE AN IMMINENT HAZARD OR DANGER TO THE PUBLIC HEALTH AND SAFETY; PROVIDING A PUBLICATION CLAUSE; PROVIDING FOR ENGROSSMENT AND ENROLLMENT; AND PROVIDING AN EFFECTIVE DATE.

WHEREAS, the City of Celina, Texas, is a Home Rule Municipality located in Collin County and Denton County, Texas, created in accordance with provisions of the Texas Local Government Code the Texas Constitution and operating pursuant to the enabling legislation of the State of Texas; and

WHEREAS, the City of Celina, Texas is a home rule municipality empowered under the Texas Local Government Code, Section 51.001, to adopt an ordinance or rule that is for the good government of the City; and

WHEREAS, the Texas Local Government Code, Chapter 214, was amended by Senate Bill No. 365, an act of the 77th Texas Legislature, by adding Subchapter G, which provides for the adoption of the International Residential Code as a municipal residential building code in the State of Texas; and

WHEREAS, the City Council does hereby find and determine that the adoption of this Ordinance is in the best interest of the public health, safety, morals and general welfare of the City to adopt the construction and related codes as set forth herein;

**NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE
CITY OF CELINA, COLLIN COUNTY, TEXAS:**

SECTION 1
INCORPORATION OF PREMISES

That the above and foregoing premises are true and correct and are incorporated herein and made a part hereof for all purposes.

SECTION 2
FINDINGS

After due deliberations the City Council has concluded that the adoption of this Ordinance is in the best interest of the City of Celina, Texas, and of the public health, safety and welfare.

SECTION 3
AMENDMENT

That Chapter 3: Building Regulations; Article 3.02: Technical and Construction Codes and Standards; Section 3.02.001 Enforcement, Add Section 3.02.003 Adoption by Reference is hereby amended to read as follows:

DIVISION 1. GENERALLY

Section 3.02.001 – Enforcement

The City Building Official shall have the authority and power to enforce all provisions of the International Building Code, 2018 Edition and appendices, as amended; the International Fire Code, 2018 Edition and appendices, as amended; the International Residential Code, 2018 Edition and appendices, as amended; the International Mechanical Code, 2018 Edition and appendices, as amended; the International Fuel Gas Code, 2018 Edition and appendices, as amended; The International Plumbing Code, 2018 Edition and appendices as amended; the National Electrical Code, 2017 Edition and appendices, as amended; the International Energy Conservation Code, 2018 Edition and appendices as amended; the International Property Maintenance Code, 2018 Edition and appendices as amended; the International Swimming Pool Spa Code and appendices as amended; the Existing Building Code, 2018 Edition and appendices as amended; ICC-NSSA 500 -14 Edition and appendices as amended.

Section 3.02.003 - Adoption by Reference.

1. There is hereby adopted by the City of Celina for establishing rules and regulations for the construction, alteration, removal, demolition, equipment, use and occupancy, location and maintenance of buildings and structures, including permits and penalties, the following codes:
 - a. The International Building Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - b. The International Fire Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - c. The International Residential Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - d. The International Mechanical Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - e. The International Fuel Gas Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - f. The International Plumbing Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - g. The National Electrical Code, being in particular the 2017 edition and appendices, as amended, as published by the National Fire Protection Association, except as it may be in conflict with the provisions of any ordinance of the city.
 - h. The International Energy Conservation Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - I. The International Property Maintenance Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - J. The International Swimming Pool and Spa Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the city.
 - k. The International Existing Building Code, being in particular the 2018 edition and appendices, as amended, except as it may be in conflict with the provisions of any ordinance of the City.
 - L. The International Code Council – National Storm Shelter Association 500, being in particular the ICC 500-2014 edition and appendices, as amended, except as it may be in conflict with provisions of any ordinance of the City.
2. The building codes adopted by reference in subsection (1) of this section are hereby amended in the following particulars:
 - a. The following words, terms and phrases, when used in this section, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning.

Permanent toilet facilities - means a room in an existing building (including a construction trailer) or in the building being constructed with a water closet installed in such room, which conforms to the plumbing code, and is continuously available to all workers involved in a construction project.

Temporary toilet facilities - means a portable, fully enclosed, chemically sanitized toilet which is serviced and cleaned at least once each week.

- b. Every construction project requiring a permit within the city shall have adequate toilet facilities for workers associated with the project. The following shall be considered adequate facilities:

Commercial and Residential construction projects: At least one toilet facility for every ten (10) workers shall be maintained in each subdivision for the employees or subcontractors of each builder holding a permit for a building in that subdivision. Each builder must provide a toilet facility as long as the builder holds an active permit in the subdivision.

3. Authority to establish policy standards, the Building and Fire Official shall, have authority to establish certain policy guidelines or standards regulating various provisions of the residential, building, fire, plumbing, fuel gas, mechanical, electrical, property maintenance, swimming pool, spa, existing buildings, abatement of dangerous buildings and health codes adopted in this chapter that are subject to the standardization of construction or health methods and/or local interpretation. The Building Official shall have the authority to outline conditions and provide for code consistency to rules, regulations, or laws with county, state or federal agencies.
4. Unless deleted, amended, expanded or otherwise changed herein, all provisions of such Code shall be fully applicable and binding. Any reference to the NFPA Codes other than the National Electric Code shall mean the most current edition available.
5. Amendments. The following noted portions of the above noted codes are hereby amended to read as follows:

DIVISION 2. BUILDING CODE

Section 3.02.051 - International Building Code amendments:

The following noted portions of the International Building Code are hereby amended to read as follows:

Section 101.4; change to read as follows:

101.4 Referenced codes. The other codes listed in Sections 101.4.1 through 101.4.8 and referenced elsewhere in this code, when specifically adopted, shall be considered part of the requirements of this code to the prescribed extent of each such reference. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the Electrical Code shall mean the Electrical Code as adopted.

Section 101.4.7; add the following:

101.4.8 Electrical. The provisions of the Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

Section 103 Department of Building Safety and 103.1; amend to read as follows:

Building Inspections Department

103.1 Creation of enforcement agency. The Department of Building Safety Building Inspections Department is hereby created and the official in charge thereof shall be known as the building official.

Section [A] 104.2.1; Determination of substantially improved or substantially damaged existing buildings and structures in flood hazard areas: Delete entire section

Section 104.10.1; Flood hazard areas: Delete entire section

Section 105.2; under sub-title entitled “Building” delete items 1, 2, 10 and 11 and re-number as follows:

Building:

1. ~~One-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11 m2).~~
2. ~~Fences not over 7 feet (1829 mm) high.~~
3. 1. (Unchanged)
4. 2. (Unchanged)
5. 3. (Unchanged)
6. 4. (Unchanged)
7. 5. (Unchanged)
8. 6. (Unchanged)
9. 7. (Unchanged)
10. ~~Shade cloth structures constructed for nursery or agricultural purposes, not including service systems.~~
11. ~~Swings and other playground equipment accessory to detached one and two family dwellings~~
12. 8. (Unchanged)
13. 9. (Unchanged)

Section 109; add Section 109.7 to read as follows:

109.7 Re-inspection Fee. A fee as established by city council resolution may be charged when:

1. The inspection called for is not ready when the inspector arrives;
“Not ready” is defined as being obviously incomplete.
(Example: required element is missing, such as no water on DWV water test, No brick ties on framing brick-tie inspection, Work by trade is still being performed)
2. No building address is clearly posted;
Address must be posted according to the following minimums:
T-Pole / Plumbing Rough-in: on T-pole brace,
Framing / MEP: clearly posted on structure, trash container or sign
Meter release or other inspection after “dry-in”: permanent address displayed on structure
3. City approved plans are not on the job site available to the inspector, if required on job site by Chief Building Inspector or Building Official;
4. The building is locked or work otherwise not available for inspection when called;
5. The job site is red-tagged twice for the same item;
6. Failure to maintain erosion control, trash control or tree protection.

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

Section 109; add Section 109.8, 109.8.1, 109.8.2 and 109.9 to read as follows:

109.8 Work without a permit.

109.8.1 Investigation. Whenever work for which a permit is required by this code has been commenced without first obtaining a permit, a special investigation shall be made before a permit may be issued for such work.

109.8.2 Fee. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code or the city fee schedule as applicable. The payment of such investigation fee shall not exempt the applicant from compliance with all other provisions of either this code or the technical codes nor from penalty prescribed by law.

109.9 Unauthorized cover up fee. Any work concealed without first obtaining the required inspection in violation of Section 110 shall be assessed a fee as established by the city fee schedule.

Section 110.3.5; Lath, gypsum board and gypsum panel product inspection; Delete

Section 202; amend definition of Ambulatory Care Facility as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing or similar care on a less than 24-hour basis to individuals who are rendered incapable of self-preservation by the services provided. This group may include but not be limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

Section 202; add definition of Assisting Living Facilities to read as follows.

ASSISTED LIVING FACILITIES. A building or part thereof housing persons, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment which provides personal care services. The occupants are capable of responding to an emergency situation without physical assistance from staff.

Section 202; change definition of "Atrium" as follows:

ATRIUM. An opening connecting three or more stories... *{Balance remains unchanged}*

Section 202; amend definition to read as follows:

HIGH-RISE BUILDING. A building with an occupied floor located more than 75 55 feet (22 860 mm) (16 764 mm) above the lowest level of fire department vehicle access

Section 202; add definition of "Repair Garage" as follows:

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such as lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

Section 202; amend definition of "Special Inspector" to read as follows:

SPECIAL INSPECTOR. A qualified person employed or retained by an approved agency who shall prove to the satisfaction of the registered design professional in responsible charge and approved by the Building Official as having the competence necessary to inspect a particular type of construction requiring special inspection.

Section 303.1.3; add a sentence to read as follows:

303.1.3 Associated with Group E occupancies. A room or space used for assembly purposes that is associated with a Group E occupancy is not considered a separate occupancy. Except when applying the assembly requirements of Chapter 10 and 11.

Section 304.1; add the following to the list of occupancies:

Fire stations

Police stations with detention facilities for 5 or less

Section 307.1.1; add the following sentence to Exception 4:

4. Cleaning establishments... {Text unchanged} ...with Section 707 or 1-hour horizontal assemblies constructed in accordance with Section 711 or both. See also IFC Chapter 21, Dry Cleaning Plant provisions.

Section 403.1, Exception 3; change to read as follows:

3. Open air portions of buildings ~~Buildings~~ with a Group A-5 occupancy in accordance with Section 303.6.

Section 403.3, Exception; delete item 2

Section 403.3.2; Change to read as follows:

403.3.2 Water supply to required fire pumps. In buildings that are more than ~~420~~ 120 feet (36.5 m) in building height, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate.

Exception: {No change to exception.}

Section 404.5; delete Exception

Section 406.3.3.1; Carport separation; amend to read as follows:

A fire separation is not required between a Group R-2 and U carport provided that the carport is entirely open on all sides and that the distance between the two is at least 10 feet (3048 mm).

Section 423 Storm Shelters; amend section 423.3, 423.4, 423.4.1 to read as follows and delete section 423.4.2

423.3 Critical emergency operations. In areas where the shelter design wind speed for tornados in accordance with Figure 304.2(1) of ICC 500 is 250 mph, all new buildings for 911 call stations, emergency operation centers and fire, rescue, ambulance and police stations shall comply with Table 1604.5 as a Risk Category IV structure and shall be provided with a storm shelter constructed in accordance with ICC 500.

423.4 Group E occupancies. In areas where the shelter design wind speed for tornados is 250 mph in accordance with Figure 304.2(1) of ICC 500, all new buildings for Group E occupancies with an occupant load of 50 or more shall have a storm shelter constructed in accordance with ICC 500.

Exceptions:

1. Group E day care facilities
2. Group E occupancies accessory to places of religious worship
3. Buildings meeting the requirements for shelter design in ICC 500

423.4.1 Required occupant capacity. The required occupant capacity of the storm shelter shall include all of the buildings on the site and shall be the total occupant load of the classrooms, vocational rooms and offices in the Group E occupancy.

Exceptions:

1. Where a new building is being added on an existing Group E site, and where the new building is not of sufficient size to accommodate the required occupant capacity of the storm shelter for all of the buildings on the site, the storm shelter shall at a minimum accommodate the required occupant capacity for the new building.
2. Where approved by the code official, the required occupant capacity of the shelter shall be permitted to be reduced by the occupant capacity of any existing storm shelters on the site.
3. For public schools, the required occupant capacity of the storm shelter shall be calculated by multiplying 1.05 by the Texas Education Agency maximum student capacity for the classroom and laboratory spaces according to Title 19, Part 2, Chapter 61, Subchapter CC, Section 61.1036 of the Texas Administrative Code. The Design Professional in Responsible Charge shall provide an analysis showing the calculation of the maximum student capacity on the construction documents.

Table 506.2; delete footnote I. from table 506.2

~~I. The maximum allowable area for a single-story non-sprinklered Group U greenhouse is permitted to be 9000 square feet or the allowable area shall be permitted to comply with Table C102.1 of Appendix C~~

Section 506.3.1 Minimum percentage of perimeter; add sentence to read as follows:

{text unchanged}... Such open space shall be either on the same lot or dedicated for public use and shall be accessed from a street or approved fire lane. In order to be considered as accessible, if not in direct contact with a street or fire lane, a minimum 10-foot wide pathway meeting fire department access from the street or approved fire lane shall be provided

Section 602.1.1 Minimum Requirements; add sentence to read as follows:

602.1.1 Minimum Requirements. [Existing Text to remain] Where a building contains more than one distinct type of construction, the building shall comply with the most restrictive area, height, and stories, for the lesser type of construction or be separated by fire walls.

Section 708.4.2 Fireblocks and draftstops in combustible construction; Amend exception 1. to read as follows:

708.4.2 Fireblocks and draftstops in combustible construction. [Body of text unchanged]

Exceptions:

1. Buildings equipped with an automatic sprinkler system installed throughout in accordance with Section 903.3.1.1, or in accordance with Section 903.3.1.2 provided that sprinkler protection is provided in the space between the top of the fire partition and the underside of the floor or roof sheathing, deck or slab above as required for systems complying with Section 903.3.1.1. Portions of buildings containing concealed spaces filled with noncombustible insulation as permitted for sprinkler omission shall not apply to this exception for draftstopping. [Remainder unchanged]

Section 718.3 Draftstopping in floors; amend exception to read as follows:

Exceptions: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1. and provided that in combustible construction, sprinkler protection is provided in the floor space.

Section 718.4 Draftstopping in attics; amend exception to read as follows:

Exceptions: Buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and provided that in combustibile construction, sprinkler protection is provided in the attic space.

Section 901.6.1; add Section 901.6.1.1 to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be back flushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.
8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the fire code official for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the fire code official.

Section 903.1.1; amend to read as follows:

[F] 903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in addition to automatic sprinkler protection where recognized by the applicable standard, or as approved by the fire code official.

Section 903.2 Where required; add paragraph to read as follows and delete the exception:

[F] 903.2 Where required. [Text unchanged] Automatic Sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt

trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry doors to the elevator machine room indicating “ELEVATOR MACHINERY – NO STORAGE ALLOWED.”

Section 903.2.9; add Section 903.2.9.3 to read as follows:

[F] 903.2.9.3 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Section 903.2.11; amend 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings with a floor level, other than penthouses in compliance with Section 1509 of the *International Building Code*, 35 feet (16 764 10 668mm) or more above the lowest level of fire department vehicle access.

Exception:

Open parking structures in compliance with Section 406.5 of the *International Building Code*.

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572 mm), see Chapter 32 of the IFC to determine if those provisions apply.

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spraying rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings over 6,000 sq. ft. An automatic sprinkler system shall be installed throughout all buildings with a building area over 6,000 sq. ft. For the purpose of this provision, firewalls shall not define separate buildings.

Exception: Open parking garages in compliance with Section 406.5 of the *International Building Code*.

Section 903.3.1.1.1; amend to read as follows:

[F] 903.3.1.1.1 Exempt locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such. *{Text unchanged}*... because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. Elevator machine rooms, machinery spaces, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Section 903.3.1.2; add Section 903.3.1.2.3 to read as follows:

[F]Section 903.3.1.2.3 Attics and Attached Garages. Sprinkler protection is required in attic spaces of such buildings two or more stories in height, in accordance with NFPA 13 and/or NFPA 13R, and attached garages.

Section 903.3.1.3; change to read as follows:

[F] 903.3.1.3 NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings, Group R-3 and R-4 condition 1 and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D or in accordance with state law

Section 903.3.1.4; add to read as follows:

[F] 903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

Section 903.3.5 Water Supplies; add a second paragraph to read as follows:

[F] Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every fire protection system shall be designed with a 10 psi safety factor. Reference Section IFC 507.4 for additional design requirements.

Section 903.4 Sprinkler system supervision and alarms; add a second paragraph after the exceptions to read as follows:

[F] Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering

Section 903.4.2 Alarms; add second paragraph to read as follows:

[F] The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 905.2 Installation standard; change to read as follows:

[F] 905.2 Installation standard. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

Section 905.3; add Section 905.3.9 and exception to read as follows:

[F] 905.3.9 Buildings exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry, semi-automatic dry, and manual dry standpipes are allowed as provided for in NFPA 14 where approved by the fire code official.
2. R-2 occupancies of four stories or less in height having no interior corridors.

Section 905.4; change item 1, 3, 5, and add item 7: to read as follows:

- [F] 1. In every required ~~interior~~ exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. {No change.}
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
- Exception:** Where floor areas adjacent to an exit passageway are reachable from an ~~interior~~ exit stairway hose connection by a {No change to rest.}
4. {No change.}
5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way a hose connection ~~shall be~~ located to serve the roof or at the highest landing of an ~~interior~~ exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. {No change.}
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.9 Valve supervision; add a second paragraph after the exceptions to read as follows:

[F] Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering

Section 907.1; add Section 907.1.4 to read as follows:

[F] **907.1.4 Design standards.** Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

Section 907.2.1; change to read as follows:

[F] **907.2.1 Group A.** A manual fire alarm system that activates the occupant notification system in accordance with new Section 907.5 shall be installed in Group "A" occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group "A" occupancies not separated from one another in accordance with Section 707.3.10 of the *International Building Code* shall be considered as a single occupancy for the purposes of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Exception: {unchanged.}

Activation of fire alarm notification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

Section 907.2.3; add exception 1.1 and change to read as follows:

[F] **907.2.3 Group E.** A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When *automatic sprinkler systems* or smoke

detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

[F] Exceptions:

1. {no change}

1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.) {no change to remainder of exceptions}

Section 907.2.12, exception 3; amend to read as follows:

[F] 3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants and similarly enclosed areas.

Section 907.4.2 Manual fire alarm boxes; add section 907.4.2.7 to read as follows:

[F] 907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

Section 907.6.1; add Section 907.6.1.1 to read as follows:

[F] 907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from an addressable input (monitor) module may be wired Class B, provided the distance from the addressable module to the initiating device is ten feet or less.

Section 907.6.3 Initiating device identification; delete all four exceptions:

Section 907.6.6; add sentence at end of paragraph to read as follows:

[F] See 907.6.3 for the required information transmitted to the supervising station.

Section 910.2 Where required; change exception 2 and 3 to read as follows:

- [F] 2.** Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
- 3.** Only manual smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m^2S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

Section 910.2 Where required; add section 910.2.3 with exceptions to read as follows:

[F] 910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

Section 910.3 Smoke and heat vents; Add Section 912.910.3.4 to read as follows:

[F] 910.3.4 Vent operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

[F] 910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically. The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only system per 910.2

[F] 910.3.4.2 Nonsprinklered buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

Section 910.4.3.1; change to read as follows:

[F] 910.4.3.1 Makeup air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be ~~manual or~~ automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust.

Section 912.2 Location; add section 912.2.3 to read as follows:

[F] 912.2.3 Hydrant distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

Section 913.2.1 Protection of fire pump rooms; add Section 913.2.1.1 and exception to read as follows:

913.2.1.1 Fire Pump Room Access. When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by IFC Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the fire code official. Access keys shall be provided in the key box as required by IFC Section 506.1.

Section 1006.2.2 Egress based on use; add new Section 1006.2.2.7 to read as follows:

1006.2.2.7 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the electrical code as adopted.

Section 1009.8; amend section 1009.8 and add Exception 7 to read as follows:

1009.8 Two Way Communication. A two-way communication system complying with Sections 1009.8.1 and 1009.8.2 shall be provided at the landing serving each elevator required to be accessible on each accessible floor that is one or more stories above or below the level of exit discharge.

Exceptions:

7. Buildings regulated under State Law and built in accordance with State registered plans, including variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and chapter 11.

Section 1010.1.9.5 Bolt locks; amend exceptions 3 and 4 to read as follows:

Exceptions:

3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F, M or S occupancy. *{Remainder unchanged}*
4. Where a pair of doors serves a Group A, B, F, M or S occupancy *{Remainder unchanged}*

Section 1020.1 Construction; add exception 6 to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

Section 1101.1 Scope; Add exception to read as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

Section 2901.1 Scope; add a sentence to read as follows:

[P] 2901.1 Scope. *{existing text to remain}* The provisions of this Chapter are meant to work in coordination with the provisions of Chapter 4 of the International Plumbing Code. Should any conflicts arise between the two chapters, the Building Official shall determine which provision applies.

Section 2902.1 Minimum number of fixtures; add a second paragraph to read as follows:

In other than E Occupancies, the minimum number of fixtures in Table 2902.1 may be lowered, if requested in writing, by the applicant stating reasons for a reduced number and approved by the Building Official.

Table 2902.1; add footnote g to read as follows:

g. Drinking fountains are not required in M Occupancies with an occupant load of 100 or less, B Occupancies with an occupant load of 25 or less, and for dining and/or drinking establishments.

Section 2902.1 Minimum number of fixtures; add new Section 2902.1.4 to read as follows:

2902.1.4 Additional fixtures for food preparation facilities. In addition to the fixtures required in this Chapter, all food service facilities shall be provided with additional fixtures set out in this section.

2902.1.4.1 Hand washing lavatory. At least one hand washing lavatory shall be provided for use by employees that is accessible from food preparation, food dispensing and ware washing areas. Additional hand washing lavatories may be required based on convenience of use by employees.

2902.1.4.2 Service sink. In new or remodeled food service establishments, at least one service sink or one floor sink shall be provided so that it is conveniently located for the cleaning of mops or similar wet floor cleaning tool and for the disposal of mop water and similar liquid waste. The location of the service sink(s) and/or mop sink(s) shall be approved by the **City of Celina** Health Department.

Section 3001.2 Emergency elevator communication systems for the deaf, hard of hearing and speech impaired; delete entire section.

Section 3002.1 Hoistway enclosure protection; add exceptions to read as follows:

Exceptions:

1. Elevators wholly located within atriums complying with Section 404 shall not require hoistway enclosure protection.
2. Elevators in open or enclosed parking garages that serve only the parking garage, and complying with Sections 406.5 and 406.6, respectively, shall not require hoistway enclosure protection.

Section 3005.4 Machine rooms, control rooms, machinery spaces and control spaces; amend to read as follows:

Elevator machine rooms, control rooms, control spaces and machinery spaces shall be enclosed with fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both. [Remainder unchanged]

Exceptions:

1. Elevator machine rooms, control rooms, machinery spaces and control spaces completely located within atriums shall not require enclosure protection.
2. Elevator machine rooms, control rooms, machinery spaces and control spaces in open or enclosed parking garages that serve only the parking garage, shall not require enclosure

Section 3005 Machine Rooms; add Section 3005.7 to read as follows:

3005.7 Fire Protection in Machine rooms, control rooms, machinery spaces and control spaces.

3005.7.1 Automatic sprinkler system. The building shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, except as otherwise permitted by Section 903.3.1.1.1 and as prohibited by Section 3005.7.2.1.

3005.7.2.1 Prohibited locations. Automatic sprinklers shall not be installed in machine rooms, elevator machinery spaces, control rooms, control spaces and elevator hoist-ways.

3005.7.2.2 Sprinkler system monitoring. The sprinkler system shall have a sprinkler control valve supervisory switch and water-flow initiating device provided for each floor that is monitored by the building's fire alarm system.

3005.7.3 Water protection. An approved method to prevent water from infiltrating into the hoistway enclosure from the operation of the automatic sprinkler system outside the elevator lobby shall be provided.

3005.7.4 Shunt trip. Means for elevator shutdown in accordance with Section 3005.5 shall not be installed.

Section 3005 Machine rooms; add Section 3005.8 to read as follows:

3005.8 Storage. Storage shall not be allowed within the elevator machine room, control room, machinery spaces and or control spaces. Provide approved signage at each entry to the above listed locations stating: "No Storage Allowed."

Section 3006.2 Hoistways opening protection required; amend 5. to read as follows:

5. The building is a high rise and the elevator hoistway is more than ~~75 feet (22 860 mm)~~ 55 feet (16 764 mm) in height. The height of the hoistway shall be measured from the lowest floor at or above grade to the highest floors served by the hoistway.

DIVISION 3. FIRE CODE

Section 3.02.101 International Fire Code amendments:

The following noted portions of the International Fire Gas Code are hereby amended to read as follows.

Section 102.1 Construction and design provisions; amend #3 to read as follows:

3. Existing structures, facilities, and conditions when required in Chapter 11 or in specific sections of this code.

Section 105.3.3 Occupancy prohibited before approval; amend to read as follows:

105.3.3 Occupancy Prohibited before Approval. The building or structure shall not be occupied prior to the fire code official issuing a permit when required and conducting associated inspections indicating the applicable provisions of this code have been met.

Section 105.4.6 Retention of construction documents; amend to read as follows:

105.4.6 Retention of construction documents. One set of construction documents (printed or digital) shall be retained by the fire code official for a period of not less than 180 days from the date of the completion of the permitted work, or as required by state or local laws. One set of approved construction documents shall be returned to the applicant and said set, along with the fire department permit, and plan review comments, if any, shall be kept on the site of the building or work from the date issued and until the completion of the permits associated inspections and the Fire Department's Final Certificate of Occupancy Inspection, where applicable.

Section 105.7 Required construction permits; add sections 105.7.26 to read as follows:

105.7.26 Electronic access control systems. Construction permits are required for the installation or modification of an electronic access control system, as specified in Chapter 10. A separate construction permit is required for the installation or modification of a fire alarm system that may be connected to the access control system. Maintenance performed in accordance with this code is not considered a modification and does not require a permit.

Section 106.2 Schedule of permit fees; amend to read as follows:

106.2 Schedule of Fees. A fee for each permit, inspection, or re-inspection shall be paid as required, in accordance with the schedule provided in City of Celina adopted fee schedule, or future ordinance(s) amending or repealing said ordinance.

Section 106.3 Work commencing before permit issuance; add second paragraph to read as follows:

Work commencing before permit issuance, shall also be known as working without a permit and shall include non-compliance by the permit holder of Sections 105.3.5 and 105.4.6. Fees for working without a permit are established in City of Celina adopted fee schedule or future ordinance(s) amending or repealing said ordinance.

Section 107 Inspections; add Section 107.5 and 107.5.1 to read as follows:

107.5 Inspection of existing premises. The fire code official or designated representative shall inspect all buildings, premises, or portions thereof as often as may be necessary to ensure continued compliance with the provisions of this code. An initial inspection shall be made at no charge to the responsible party. If the fire code official or designated representative(s) are required to make follow-up inspections after the initial inspection to verify correction of noted violation(s) during the previous inspections, a fee shall be charged. The occupant, lessee, or person making use of the building or premise shall pay said fee(s), as established in Section 113.2, within thirty (30) days of being billed as a condition to continue lawful occupancy of the building or premise. Continued non-compliance may result in the issuance of a citation and subject to the penalties established in Section 109.4.

107.5.1 Habitual violations. An occupant, lessee, or person making use of a building or premise that has been cited for a violation of this code, or previous code for the same violation over multiple initial maintenance inspections shall waive right to notice of violation in Section 109.3 and may be immediately issued a citation subject to the penalties as established by Section 109.4

Section 110.4 Violation penalties; amend to read as follows:

110.4 Violation penalties. Any person, firm, or corporation violating any of the provisions or terms of this Article or Code adopted herein shall be guilty of a misdemeanor and upon conviction in the Municipal Court of the City of Celina, shall be subjected to a fine not to exceed two thousand and no/100 dollars (\$2,000.00) for each offense, and each and every day any such violation exist be deemed to constitute a separate offense.

Section 112.4 Failure to comply; amend to read as follows:

112.4 Failure to comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe work condition, shall be liable to a fine of not more than two thousand and no/100 dollars (\$2,000.00) for each offense, and each and every day such violation shall continue shall be deemed to constitute a separate offense.

Section 202 Definitions; amend and add definitions to read as follows:

AMBULATORY CARE FACILITY. Buildings or portions thereof used to provide medical, surgical, psychiatric, nursing, or similar care on a less than 24-hour basis to persons who are rendered incapable of self-preservation by the services provided. This group may include but not limited to the following:

- Dialysis centers
- Sedation dentistry
- Surgery centers
- Colonic centers
- Psychiatric centers

ATRIUM. An opening connecting three or more stories ... {remaining text unchanged}

DEFEND IN PLACE. A method of emergency response that engages building components and trained staff to provide occupant safety during an emergency. Emergency response involves remaining in place, relocating within the building, or both, without evacuating the building.

FIRE WATCH. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals or standby personnel when required by the fire code official, for

the purpose of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

FIREWORKS. Any composition or device for the purpose of producing a visible or an audible effect for entertainment purpose by combustion, deflagration, detonation, and/or activated by ignition with a match or other heat producing device that meets the definition of 1.4G fireworks or 1.3G fireworks as set forth herein ... {remainder of text unchanged}.

HIGH-PILED COMBUSTIBLE STORAGE. {add second paragraph} Any building classified as a group S Occupancy or Speculative Building exceeding 6,000 sq.ft. that has a clear height in excess of 14 feet, making it possible to be used for storage in excess of 12 feet, shall be considered to be high-piled storage. When a specific product cannot be identified, a fire protection system and life safety features shall be installed as for Class IV commodities, to the maximum pile height.

HIGH-RISE BUILDING. A building with an occupied floor located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access.

REPAIR GARAGE. A building, structure or portion thereof used for servicing or repairing motor vehicles. This occupancy shall also include garages involved in minor repair, modification and servicing of motor vehicles for items such a lube changes, inspections, windshield repair or replacement, shocks, minor part replacement and other such minor repairs.

SELF-SERVICE STORAGE FACILITY. Real property designed and used for the purpose of renting or leasing individual storage spaces to customers for the purpose of storing and removing personal property on a self-service basis.

STANDBY PERSONNEL. Qualified fire service personnel approved by the Fire Chief. When utilized, the number required shall be as directed by the Fire Chief. Charges for utilization shall be as normally calculated by the jurisdiction.

UPGRADED OR REPLACED FIRE ALARM SYSTEM. A fire alarm system that is upgraded or replaced includes, but is not limited to the following:

- Replacing one single board or fire alarm control unit component with a newer model
- Installing a new fire alarm control unit in addition to or in place of an existing one
- Conversion from a horn system to an emergency voice/alarm communication system
- Conversion from a conventional system to one that utilizes addressable or analog devices

The following are not considered an upgrade or replacement:

- Firmware updates
- Software updates
- Replacing boards of the same model with chips utilizing the same or newer firmware

Section 307.1.1 Prohibited open burning; amend to read as follows:

307.1.1 Prohibited Open Burning. Open burning shall be prohibited that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.

Exception: {No change.}

Section 307.2 Permit required; amend to read as follows:

307.2 Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.6 prior to kindling a fire for recognized silviculture or range or wildlife management practices, prevention or control of disease or pests, or open burning. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

Examples of state or local law, or regulations referenced elsewhere in this section may include but not be limited to the following:

1. Texas Commission on Environmental Quality guidelines and/or restrictions
2. State, County, or local temporary or permanent bans on open burning.
3. Local written policies as established by the fire code official.

Section 307.2 Permit required; add Section 307.2.2 to read as follows:

307.2.2 Acceptable material. Materials acceptable to burn are trees, brush, grass, and other dry plant growth for land clearing operations where no practical alternative to burning exists and the materials being burned are only from that property.

Section 307.3 Extinguishment authority; amend to read as follow;

307.3 Extinguishment Authority. The fire code official is authorized to order the extinguishment by the permit holder, another person responsible or the fire department of open burning that creates or adds to a hazardous or objectionable situation.

Section 307.4 Location; amend to read as follows:

307.4 Location. The location for open burning shall not be less than 300 feet (91,440 mm) from any structure, and provisions shall be made to prevent the fire from spreading to within 300 feet (91,440 mm) of any structure.

Exceptions: {no change}

Section 307.4.3 Portable outdoor fireplaces; add exception #2 to read as follows:

Exceptions:

1. unchanged
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system.

Section 307.4 Locations; add Section 307.4.4 and 307.4.5 to read as follows:

307.4.4 Permanent outdoor firepit. Permanently installed outdoor firepit's for recreational fire purposes shall not be installed within 10 feet of a structure or combustible material.

Exception: Permanent installed outdoor fireplaces constructed in accordance with the International Building Code

307.4.5 Trench Burns. Trench burns shall be conducted in air curtain trenches and in accordance with Section 307.2.

Section 307.5 Attendance; amend to read as follows:

307.5 Attendance. Open burning, trench burns, bonfires or recreational fires shall be constantly attended until the . . . {remainder of section unchanged}.

Section 308.1.4 Open-flame cooking devices; amend to read as follows:

308.1.4 Open-flame cooking devices. Open-flame cooking devices, charcoal grills and other similar devices used for cooking shall not be located or used on combustible balconies, decks, or within 10 feet (3048 mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings, except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pounds (9.08 kg) LP-gas capacity] with an aggregate LP-gas capacity not to exceed 100 lbs. (5 containers).
2. Where buildings, balconies and decks are protected by an approved automatic sprinkler system except that LP-gas containers are limited to a water capacity not greater than 50 pounds (22.68 kg) [nominal 20 pound (9.08 kg) LP-gas capacity], with an aggregate LP-gas capacity not to exceed 40 lbs. (2 containers).
3. {no change}

Section 308.1.6.2 Portable fueled open-flame devices, Exception #3; amended to read as follows:

Exceptions:

3. Torches or flame producing devices in accordance with Section 308.1.3.

Section 308.1.6.3 Sky lanterns; amend to read as follows:

308.1.6.3 Sky Lanterns. A person shall not release or cause to be released an unmanned free-floating devices containing an open flame or other heat source, such as but not limited to a sky lantern.

Section 311.5 placards; amend to read as follows:

311.5 Placards. The fire code official is authorized to require marking of any vacant or abandon buildings or structures determined to be unsafe pursuant to Section 110 of this code relating to structural or interior hazards as required by Section 311.5.1 through 311.5.5.

Section 403.5 Group E Occupancies; amend to read as follows:

403.5 Group E Occupancies. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for Group E occupancies and for buildings containing both a Group E occupancy and an atrium. A diagram depicting two evacuation routes shall be posted in a conspicuous location in each classroom. Group E occupancies shall also comply with Sections 403.5.1 through 403.5.3.

Section 404.2.2 Fire safety plans; add Number 4.10 to read as follows:

4.10 Fire extinguishing system controls.

Section 405.4 Time; amend Section 405.4 to read as follows:

405.4 Time. The fire code official may require an evacuation drill at any time. Drills shall be held at unexpected times and under varying conditions to simulate the unusual conditions that occur in case of fire.

Section 501.4 Timing of installation; amend to read as follows:

501.4 Timing of Installation. When fire apparatus access roads or a water supply for fire protection is required to be installed for any structure or development, they shall be installed, tested, and approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

Section 503.1.1 Building and facilities; add sentence to read as follows:

Except for one- or two-family dwellings, the path of measurement shall be along a minimum of a ten feet (10') wide unobstructed pathway around the external walls of the structure.

Section 503.2.1 Dimensions; amend to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than ~~20~~ 24 feet (~~6096 mm~~ 7315 mm), exclusive of shoulders, except for approved security gates in accordance with Section 503.6, and an unobstructed vertical clearance of not less than ~~13 feet 6 inches (4115 mm)~~ 14 feet (4267 mm).

Exception: Vertical clearance may be reduced; provided such reduction does not impair access by fire apparatus and approved signs are installed and maintained indicating the established vertical clearance when approved.

Section 503.2.2 Authority; amend to read as follows:

503.2.2 Authority. The fire code official shall have the authority to require an increase in the minimum access width, vertical clearances, and radius where they are inadequate for fire or rescue operations.

Section 503.2.3 Surface; amend to read as follows:

503.2.3 Surface. Fire apparatus access roads shall be designed and maintained to support imposed loads of 80,000 Lbs. for fire apparatus and shall be surfaced so, as to provide all-weather driving capabilities.

Section 503.3 Marking; amend to read as follows:

503.3 Marking. Striping, signs, or other markings, when approved by the code official, shall be provided for fire apparatus access roads to identify such roads or prohibit the obstruction thereof. Striping, signs and other markings shall be maintained in a clean and legible condition at all times and be replaced or repaired when necessary to provide adequate visibility.

1. **Striping.** Fire apparatus access roads shall be continuously marked by painted lines of red traffic paint six inches (6") in width to show the boundaries of the lane. The words "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" shall appear in four inch (4") white letters at 25 feet intervals on the red border markings along both sides of the fire lanes. Where a curb is available, the striping shall be on the vertical face of the curb.

2. **Sign.** Signs shall read "NO PARKING FIRE LANE" or "FIRE LANE NO PARKING" and shall be 12" wide and 18" high. Signs shall be painted on a white background with letters and borders in red, using not less than 2" lettering. Signs shall be permanently affixed to a stationary post and the bottom of the sign shall be six feet, six inches (6'6") above finished grade. Signs shall be spaced not more than fifty feet (50') apart. Signs may be installed on permanent buildings or walls or as approved by the Fire Chief.

Section 503.4 Obstruction of fire apparatus access roads; amend to read as follows:

503.4 Obstruction of fire apparatus access roads. Fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and any area marked as a fire lane as described in Section 503.3 shall be maintained at all times.

Section 505.1 Address identification; amend to read as follows:

505.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 4 inches (102

~~mm)~~ 6 inches (152.4 mm) high with a minimum stroke width of 1/2 inch (12.7 mm). Where required by the fire code official, address numbers shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road, buildings do not immediately front a street, and/or the building cannot be viewed from the public way, a monument, pole or other sign with approved 6 inch (152.4 mm) height building numerals or addresses and 4 inch (101.6 mm) height suite/apartment numerals of a color contrasting with the background of the building or other approved means shall be used to identify the structure. Numerals or addresses shall be posted on a minimum 20 inch (508 mm) by 30 inch (762 mm) background on border. Address identification shall be maintained.

Exception: R-3 Single Family occupancies shall have approved numerals of a minimum 3 ½ inches (88.9 mm) in height and a color contrasting with the background clearly visible and legible from the street fronting the property and rear alleyway where such alleyway exists.

Section 507.4 Water supply test; amend to read as follows:

507.4 Water supply test date and information. The water supply test used for hydraulic calculation of fire protection systems shall be conducted in accordance with NFPA 291 “Recommended Practice for Fire Flow Testing and Marking of Hydrants” and within one year of sprinkler plan submittal. The fire code official shall be notified prior to the water supply test. Water supply tests shall be witnessed by the fire code official, as required. The exact location of the static/residual hydrant and the flow hydrant shall be indicated on the design drawings. All fire protection plan submittals shall be accompanied by a hard copy of the waterflow test report, or as approved by the fire code official. The report must indicate the dominant water tank level at the time of the test and the maximum and minimum operating levels of the tank, as well, or identify applicable water supply fluctuation. The licensed contractor must then design the fire protection system based on this fluctuation information, as per the applicable referenced NFPA standard. Reference Section 903.3.5 for additional design requirements

Section 507.5.4 Obstruction; amend to read as follows:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. Posts, fences, vehicles, growth, trash, storage and other materials or objects shall not be placed or kept near fire hydrants, fire department inlet connections or fire protection system control valves in a manner that would prevent such equipment or fire hydrants from being immediately discernible. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants.

Section 509.1 Identification; add new section 509.1.2 to read as follows:

509.1.2 Sign Requirements. Unless more stringent requirements apply, lettering for signs required by this section shall have a minimum height of 2 inches (50.8 mm) when located inside a building and 4 inches (101.6 mm) when located outside, or as approved by the fire code official. The letters shall be of a color that contrasts with the background.

Section 603.3.1, 603.3.2 and 603.3.2.1; amend to read as follows:

603.3.1 Fuel oil storage in outside, above-ground tanks. Where connected to a fuel-oil piping system, the maximum amount of fuel oil storage allowed outside above ground without additional protection shall be 660 gallons (2498 L). The storage of fuel oil above ground in quantities exceeding 660 gallons (2498 L) shall comply with NFPA 31 and Chapter 57.

603.3.2 Fuel oil storage inside buildings. Fuel oil storage inside buildings shall comply with Sections 603.3.2.1 through 603.3.2.5 and Chapter 57.

603.3.2.1 Quantity limits. One or more fuel oil storage tanks containing Class II or III *combustible liquid* shall be permitted in a building. The aggregate capacity of all tanks shall not exceed the following:

1. 660 gallons (2498 L) in unsprinklered buildings, where stored in a tank complying with UL 80, UL 142 or UL 2085 for Class III liquids, and also listed as a double-wall/secondary containment tank for Class II liquids.

2. 1,320 gallons (4996 L) in buildings equipped with an *automatic sprinkler* system in accordance with Section 903.3.1.1, where stored in a tank complying with UL 142 or UL 2085 as a double-wall/secondary containment tank.
3. 3,000 gallons (11 356 L) where stored in protected above-ground tanks complying with UL 2085 and Section 5704.2.9.7 and the room is protected by an *automatic sprinkler system* in accordance with Section 903.3.1.1.

Section 807.5.2.2 Artwork in corridors and 807.5.2.3 Artwork in classrooms; amend to read as follows:

807.5.2.2 Artwork in Corridors. Artwork and teaching materials shall be limited on the walls of corridors to not more than 20 percent of the wall area. Such materials shall not be continuous from floor to ceiling or wall to wall. Curtains, draperies, wall hangings, and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Exception: Corridors protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 shall be limited to 50 percent of the wall area.

807.5.2.3 Artwork in Classrooms. Artwork and teaching materials shall be limited on walls of classrooms to not more than 50 percent of the specific wall area to which they are attached. Curtains, draperies, wall hangings and other decorative material suspended from the walls or ceilings shall meet the flame propagation performance criteria of NFPA 701 in accordance with Section 807 or be noncombustible.

Section 901.6.1 Standards; add Section 901.6.1.1 to read as follows:

901.6.1.1 Standpipe Testing. Building owners/managers must maintain and test standpipe systems as per NFPA 25 requirements. The following additional requirements shall be applied to the testing that is required every 5 years:

1. The piping between the Fire Department Connection (FDC) and the standpipe shall be backflushed when foreign material is present, and also hydrostatically tested for all FDC's on any type of standpipe system. Hydrostatic testing shall also be conducted in accordance with NFPA 25 requirements for the different types of standpipe systems.
2. For any manual (dry or wet) standpipe system not having an automatic water supply capable of flowing water through the standpipe, the tester shall connect hose from a fire hydrant or portable pumping system (as approved by the fire code official) to each FDC, and flow water through the standpipe system to the roof outlet to verify that each inlet connection functions properly. Confirm that there are no open hose valves prior to introducing water into a dry standpipe. There is no required pressure criteria at the outlet. Verify that check valves function properly and that there are no closed control valves on the system.
3. Any pressure relief, reducing, or control valves shall be tested in accordance with the requirements of NFPA 25. All hose valves shall be exercised.
4. If the FDC is not already provided with approved caps, the contractor shall install such caps for all FDC's as required by the fire code official.
5. Upon successful completion of standpipe test, place a blue tag (as per Texas Administrative Code, Fire Sprinkler Rules for Inspection, Test and Maintenance Service (ITM) Tag) at the bottom of each standpipe riser in the building. The tag shall be check-marked as "Fifth Year" for Type of ITM, and the note on the back of the tag shall read "5 Year Standpipe Test" at a minimum.
6. The procedures required by Texas Administrative Code Fire Sprinkler Rules with regard to Yellow Tags and Red Tags or any deficiencies noted during the testing, including the required notification of the local Authority Having Jurisdiction (fire code official) shall be followed.
7. Additionally, records of the testing shall be maintained by the owner and contractor, if applicable, as required by the State Rules mentioned above and NFPA 25.

8. Standpipe system tests where water will be flowed external to the building shall not be conducted during freezing conditions or during the day prior to expected night time freezing conditions.
9. Contact the *fire code official* for requests to remove existing fire hose from Class II and III standpipe systems where employees are not trained in the utilization of this firefighting equipment. All standpipe hose valves must remain in place and be provided with an approved cap and chain when approval is given to remove hose by the *fire code official*.

Section 901.6 Inspection, testing and maintenance; add Section 901.6.4 to read as follows:

901.6.4 False Alarms and Nuisance Alarms. False alarms and nuisance alarms shall not be given, signaled or transmitted or caused or permitted to be given, signaled or transmitted in any manner.

Section 901.7 Systems out of service; amend to read as follows:

901.7 Systems Out of Service. Where a required *fire protection system* is out of service or in the event of an excessive number of activations, the fire department and the *fire code official* shall be notified immediately and, where required by the *fire code official*, the building shall either be evacuated or an *approved fire watch* shall be provided for all occupants left unprotected by the shut down until the *fire protection system* has been returned to service. ... {remaining text unchanged}

Section 903.1.1 Alternative protection; amend to read as follows:

903.1.1 Alternative Protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted ~~instead of~~ in addition to automatic sprinkler protection where recognized by the applicable standard ~~and~~, or as approved by the *fire code official*.

Section 903.2 Where required; add paragraph to read as follow and delete exceptions:

Automatic sprinklers shall not be installed in elevator machine rooms, elevator machine spaces, and elevator hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances. Storage shall not be allowed within the elevator machine room. Signage shall be provided at the entry door to the elevator machine room indicating "ELEVATOR MACHINERY – NO STORAGE ALLOWED."

Section 903.2.9 Group S-1; add section 903.2.9.3 to read as follows:

903.2.9.3 Self-service storage facility. An automatic sprinkler system shall be installed throughout all self-service storage facilities.

Section 903.2.11 Specific buildings areas and hazards; amend 903.2.11.3 and add 903.2.11.7, 903.2.11.8, and 903.2.11.9 as follows:

903.2.11.3 Buildings 35 feet or more in height. An automatic sprinkler system shall be installed throughout buildings that have one or more stories, other than penthouses in compliance with Section 1510 of the *International Building Code* that is located 35 feet (10,668 mm) or more above the lowest level of fire department vehicle access measured to the finished floor.

Exceptions: # 1. Open parking structures in compliance with Section 406.5 of the *International Building Code* having no other occupancies above the subject garage.

903.2.11.7 High-Piled Combustible Storage. For any building with a clear height exceeding 12 feet (4572mm), see Chapter 32 to determine if those provisions apply.

903.2.11.8 Spray Booths and Rooms. New and existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system.

903.2.11.9 Buildings over 6,000 sq. ft. An automatic fire sprinkler system shall be installed throughout all buildings with a building area 6,000 sq. ft. or greater, in all existing buildings that are enlarged to be 6,000 sq. ft. or greater, and in all existing buildings that the cumulative remodel over any period of time that is equal to or greater than 6,000 sq. ft.. For the purpose of this provision, fire walls shall not define separate buildings.

Exception: Open parking garages in compliance with Section 406.5 of the *International Building Code*.

Section 903.3.1.1.1 Exempt locations; amend to read as follows:

903.3.1.1.1 Exempt locations. When approved by the fire code official, automatic sprinklers shall not be required in the following rooms or areas where such . . . {text unchanged} . . . because it is damp, of fire-resistance-rated construction or contains electrical equipment.

1. Any room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. Any room or space where sprinklers are considered undesirable because of the nature of the contents, when approved by the code official.
3. Generator and transformer rooms, under the direct control of a public utility, separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. Elevator machine rooms, machinery space, and hoistways, other than pits where such sprinklers would not necessitate shunt trip requirements under any circumstances.

Section 903.3.1.2.3 Attics; delete section and replace to read as follows:

[F] Section 903.3.1.2.3 Attached Garages and Attics. Sprinkler protection is required in attached garages, and in the following attic spaces:

1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.
2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
3. Attic spaces of buildings that are two or more stories in height above grade plane or above the lowest level of fire department vehicle access.
4. Group R-4, Condition 2 occupancy attics not required by Item 1 or 3 to have sprinklers shall comply with one of the following:
 - 4.1. Provide automatic sprinkler system protection.
 - 4.2. Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3. Construct the attic using noncombustible materials.
 - 4.4. Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the *International Building Code*.
 - 4.5. Fill the attic with noncombustible insulation.

Section 903.3.1.3 NFPA 13D sprinkler systems; amend to read as follows:

903.3.1.3 NFPA 13 D sprinkler systems. Where allowed, automatic sprinkler systems installed in one- and two-family dwellings and townhomes shall be installed throughout in accordance with NFPA 13D or in accordance with state law.

Section 903.3.1 Standards; add section 903.3.1.4 to read as follows

903.3.1.4 Freeze protection. Freeze protection systems for automatic fire sprinkler systems shall be in accordance with the requirements of the applicable referenced NFPA standard and this section.

903.3.1.4.1 Attics. Only dry-pipe, preaction, or listed antifreeze automatic fire sprinkler systems shall be allowed to protect attic spaces.

Exception: Wet-pipe fire sprinkler systems shall be allowed to protect non-ventilated attic spaces where:

1. The attic sprinklers are supplied by a separate floor control valve assembly to allow ease of draining the attic system without impairing sprinklers throughout the rest of the building, and
2. Adequate heat shall be provided for freeze protection as per the applicable referenced NFPA standard, and
3. The attic space is a part of the building's thermal, or heat, envelope, such that insulation is provided at the roof deck, rather than at the ceiling level.

903.3.1.4.2 Heat trace/insulation. Heat trace/insulation shall only be allowed where approved by the fire code official for small sections of large diameter water-filled pipe.

Section 903.3.5 Water supplies; add a second paragraph to read as follows:

Water supply as required for such systems shall be provided in conformance with the supply requirements of the respective standards; however, every water-based fire protection system shall be designed with a 10 psi safety factor. Reference Section 507.4 for additional design requirements.

Section 903.4 Sprinkler system supervision and alarms; add a second paragraph after the exceptions to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 903.4.2 Alarms; add a second paragraph to read as follows:

The alarm device required on the exterior of the building shall be a weatherproof horn/strobe notification appliance with a minimum 75 candela strobe rating, installed as close as practicable to the fire department connection.

Section 905.2 Installation standards; amend to read as follows:

905.2 Installation standards. Standpipe systems shall be installed in accordance with this section and NFPA 14. Manual dry standpipe systems shall be supervised with a minimum of 10 psig and a maximum of 40 psig air pressure with a high/low alarm.

Section 905.3 Required installations; add Section 905.3.9 and exception to read as follows:

905.3.9 Buildings Exceeding 10,000 sq. ft. In buildings exceeding 10,000 square feet in area per story and where any portion of the building's interior area is more than 200 feet (60960 mm) of travel, vertically and horizontally, from the nearest point of fire department vehicle access, Class I automatic wet or manual wet standpipes shall be provided.

Exceptions:

1. Automatic dry and semi-automatic dry standpipes are allowed as provided for in NFPA 14.
2. R-2 occupancies of four stories or less in height having no interior corridors.

Section 905.4 location of Class I standpipe hose connection; amend item 1, 3 and 5, add item 7 to read as follows:

1. In every required ~~interior~~ exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at an intermediate landing between stories, unless otherwise approved by the fire code official.
2. {No change.}
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
Exception: Where floor areas adjacent to an exit passageway are reachable from an ~~interior~~ exit stairway hose connection by a {No change to rest.}
4. {No change.}

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), each standpipe shall be provided with a two-way a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with stair access to the roof provided in accordance with Section 1011.12.
6. {No change.}
7. When required by this Chapter, standpipe connections shall be placed adjacent to all required exits to the structure and at two hundred feet (200') intervals along major corridors thereafter, or as otherwise approved by the fire code official.

Section 905.9 Valve supervision; add a second paragraph after the exception to read as follows:

Sprinkler and standpipe system water-flow detectors shall be provided for each floor tap to the sprinkler system and shall cause an alarm upon detection of water flow for more than 45 seconds. All control valves in the sprinkler and standpipe systems except for fire department hose connection valves shall be electrically supervised to initiate a supervisory signal at the central station upon tampering.

Section 907.1 General; add Section 907.1.4 to read as follows:

907.1.4 Design Standards. Where a new fire alarm system is installed, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke detectors shall have analog initiating devices.

Section 907.2.1 Group A; amend to read as follows:

907.2.1 Group A. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group A occupancies having an occupant load of 300 or more persons or more than 100 persons above or below the lowest level of exit discharge. Group A occupancies not separated from one another in accordance with Section 707.3.10 of the *International Building Code* shall be considered as a single occupancy for the purpose of applying this section. Portions of Group E occupancies occupied for assembly purposes shall be provided with a fire alarm system as required for the Group E occupancy.

Activation of fire alarm modification appliances shall:

1. Cause illumination of the means of egress with light of not less than 1 foot-candle (11 lux) at the walking surface level, and
2. Stop any conflicting or confusing sounds and visual distractions.

Section 907.2.3 Group E; amend to read as follows:

907.2.3 Group E. A manual fire alarm system that initiates the occupant notification signal utilizing an emergency voice/alarm communication system meeting the requirements of Section 907.5.2.2 and installed in accordance with Section 907.6 shall be installed in Group E educational occupancies. When *automatic sprinkler systems* or smoke detectors are installed, such systems or detectors shall be connected to the building fire alarm system. An approved smoke detection system shall be installed in Group E day care occupancies. Unless separated by a minimum of 100' open space, all buildings, whether portable buildings or the main building, will be considered one building for alarm occupant load consideration and interconnection of alarm systems.

Exceptions:

1. {No change.}
- 1.1. Residential In-Home day care with not more than 12 children may use interconnected single station detectors in all habitable rooms. (For care of more than five children 2 1/2 or less years of age, see Section 907.2.6.) {No change to remainder of exceptions.}

Section 907.2.12 High-rise buildings, Exception #3; amend to read as follows:

3. Open air portions of buildings with an occupancy in Group A-5 in accordance with Section 303.1 of the International Building Code; however, this exception does not apply to accessory uses including but not limited to sky boxes, restaurants, and similarly enclosed areas.

Section 907.4.2 Manual fire alarm boxes; add Section 907.4.2.7 to read as follows:

907.4.2.7 Type. Manual alarm initiating devices shall be an approved double action type.

Section 907.6.1 Wiring; add Section 907.6.1.1 to read as follows:

907.6.1.1 Wiring Installation. All fire alarm systems shall be installed in such a manner that a failure of any single initiating device or single open in an initiating circuit conductor will not interfere with the normal operation of other such devices. All signaling line circuits (SLC) shall be installed in such a way that a single open will not interfere with the operation of any addressable devices (Class A). Outgoing and return SLC conductors shall be installed in accordance with NFPA 72 requirements for Class A circuits and shall have a minimum of four feet separation horizontal and one foot vertical between supply and return circuit conductors. The initiating device circuit (IDC) from a signaling line circuit interface device may be wired Class B, provided the distance from the interface device to the initiating device is ten feet or less.

Section 907.6.3 Initiating device identification; delete all four Exceptions.

Section 907.6.6 Monitoring; add sentence at end of paragraph to read as follows:

See 907.6.3 for the required information transmitted to the supervising station

Section 909 Smoke Control Systems; add Section 909.22 to read as follows:

909.22 Stairway or Ramp Pressurization Alternative. Where the building is equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 and the stair pressurization alternative is chosen for compliance with Building Code requirements for a smokeproof enclosure, interior exit stairways or ramps shall be pressurized to a minimum of 0.10 inches of water (25 Pa) and a maximum of 0.35 inches of water (87 Pa) in the shaft relative to the building measured with all interior exit stairway and ramp doors closed under maximum anticipated conditions of stack effect and wind effect. Such systems shall comply with Section 909, including the installation of a separate fire-fighter's smoke control panel as per Section 909.16, and a Smoke Control Permit shall be required from the fire department as per Section 105.7.

[F] 909.22.1 Ventilating equipment. The activation of ventilating equipment for the stair or ramp pressurization system shall be by smoke detectors installed at each floor level at an approved location at the entrance to the smokeproof enclosure. When the closing device for the stairway or ramp shaft and vestibule doors is activated by smoke detection or power failure, the mechanical equipment shall activate and operate at the required performance levels. Smoke detectors shall be installed in accordance with Section 907.3.

909.22.1.1 Ventilation Systems. Smokeproof enclosure ventilation systems shall be independent of other building ventilation systems. The equipment, control wiring, power wiring and ductwork shall comply with one of the following:

1. Equipment, control wiring, power wiring and ductwork shall be located exterior to the building and directly connected to the smokeproof enclosure or connected to the smokeproof enclosure by ductwork enclosed by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.
2. Equipment, control wiring, power wiring and ductwork shall be located within the smokeproof enclosure with intake or exhaust directly from and to the outside or through ductwork enclosed by not less than 2-hour barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

3. Equipment, control wiring, power wiring and ductwork shall be located within the building if separated from the remainder of the building, including other mechanical equipment, by not less than 2-hour fire barriers constructed in accordance with Section 707 of the Building Code or horizontal assemblies constructed in accordance with Section 711 of the Building Code, or both.

Exceptions:

1. Control wiring and power wiring utilizing a 2-hour rated cable or cable system.
2. Where encased with not less than 2 inches (51 mm) of concrete.
3. Control wiring and power wiring protected by a listed electrical circuit protective systems with a fire-resistance rating of not less than 2 hours.

909.22.1.2 Standby Power. Mechanical vestibule and stairway and ramp shaft ventilation systems and automatic fire detection systems shall be provided with standby power in accordance with Section 2702 of the Building Code.

909.22.1.3 Acceptance and Testing. Before the mechanical equipment is approved, the system shall be tested in the presence of the fire code official to confirm that the system is operating in compliance with these requirements.

Section 910.2 Where required; amend Exception 2 and 3 to read as follows:

2. Only manual smoke and heat removal shall not be required in areas of buildings equipped with early suppression fast-response (ESFR) sprinklers. Automatic smoke and heat removal is prohibited.
3. Only manual smoke and heat removal shall not be required in areas of buildings equipped with control mode special application sprinklers with a response time index of $50(m \cdot S)^{1/2}$ or less that are listed to control a fire in stored commodities with 12 or fewer sprinklers. Automatic smoke and heat removal is prohibited.

Section 910.2 Where required; add subsection 910.2.3 with exceptions to read as follows:

910.2.3 Group H. Buildings and portions thereof used as a Group H occupancy as follows:

1. In occupancies classified as Group H-2 or H-3, any of which are more than 15,000 square feet (1394 m²) in single floor area.

Exception: Buildings of noncombustible construction containing only noncombustible materials.

2. In areas of buildings in Group H used for storing Class 2, 3, and 4 liquid and solid oxidizers, Class 1 and unclassified detonable organic peroxides, Class 3 and 4 unstable (reactive) materials, or Class 2 or 3 water-reactive materials as required for a high-hazard commodity classification.

Exception: Buildings of noncombustible construction containing only noncombustible materials..

Section 910.3 Smoke and heat vents; add section 910.3.4 to read as follows:

910.3.4 Vent Operation. Smoke and heat vents shall be capable of being operated by approved automatic and manual means. Automatic operation of smoke and heat vents shall conform to the provisions of Sections 910.3.2.1 through 910.3.2.3.

[F] 910.3.4.1 Sprinklered buildings. Where installed in buildings equipped with an approved automatic sprinkler system, smoke and heat vents shall be designed to operate automatically.

The automatic operating mechanism of the smoke and heat vents shall operate at a temperature rating at least 100 degrees F (approximately 38 degrees Celsius) greater than the temperature rating of the sprinklers installed.

Exception: Manual only systems per Section 910.2.

910.3.4.2 Nonsprinklered Buildings. Where installed in buildings not equipped with an approved automatic sprinkler system, smoke and heat vents shall operate automatically by actuation of a heat-responsive device rated at between 100°F (56°C) and 220°F (122°C) above ambient.

Exception: Listed gravity-operated drop out vents.

Section 910.4.3.1 Make up air; amend to read as follows:

910.4.3.1 Makeup Air. Makeup air openings shall be provided within 6 feet (1829 mm) of the floor level. Operation of makeup air openings shall be ~~manual or~~ automatic. The minimum gross area of makeup air inlets shall be 8 square feet per 1,000 cubic feet per minute (0.74 m² per 0.4719 m³/s) of smoke exhaust

Section 910.4.4 Activation; amend to read as follows:

910.4.4 Activation. The mechanical smoke removal system shall be activated automatically by the automatic sprinkler system or by an approved fire detection system. Individual manual controls shall also be provided.

Exception: Manual only systems per Section 910.2.

Section 912.2 location; add Section 912.2.3 to read as follows:

Section 912.2.3 Hydrant distance. An approved fire hydrant shall be located within 100 feet of the fire department connection as the fire hose lays along an unobstructed path.

Section 913.2.1 Protection of fire pump rooms; add second paragraph and exception to read as follows:

When located on the ground level at an exterior wall, the fire pump room shall be provided with an exterior fire department access door that is not less than 3 ft. in width and 6 ft. – 8 in. in height, regardless of any interior doors that are provided. A key box shall be provided at this door, as required by Section 506.1.

Exception: When it is necessary to locate the fire pump room on other levels or not at an exterior wall, the corridor leading to the fire pump room access from the exterior of the building shall be provided with equivalent fire resistance as that required for the pump room, or as approved by the fire code official. Access keys shall be provided in the key box as required by Section 506.1.

Section 914.3.1.2 Water supply to required fire pumps; amend to read as follows:

914.3.1.2 Water Supply to required Fire Pumps. In buildings that are more than 420 ~~120~~ feet (128 m) in *building height*, required fire pumps shall be supplied by connections to no fewer than two water mains located in different streets. Separate supply piping shall be provided between each connection to the water main and the pumps. Each connection and the supply piping between the connection and the pumps shall be sized to supply the flow and pressure required for the pumps to operate. **Exception:** {No change to exception.}

Section 1006.2.2 Egress based on use; add Section 1006.2.2.6 to read as follows:

1006.2.2.6 Electrical Rooms. For electrical rooms, special exiting requirements may apply. Reference the Electrical Code as adopted.

Section 1009.8 Two-way communication; add Exception 7 to read as follows:

Exceptions:

{previous exceptions unchanged}

7. Buildings regulated under State Law and built in accordance with State registered plans, including any variances or waivers granted by the State, shall be deemed to be in compliance with the requirements of Section 1009 and Chapter 11.

Section 1010.1.9.4 Bolt Locks; amend Exceptions 3 and 4 to read as follows:

Exceptions:

3. Where a pair of doors serves an *occupant load* of less than 50 persons in a Group B, F, M or S occupancy. *{Remainder unchanged}*
4. Where a pair of doors serves a Group A, B, F, M or S occupancy *{Remainder unchanged}*

Section 1015.8 Window Openings; amend number 1 to read as follows:

1. Operable windows where the top of the sill of the opening is located more than ~~75 feet (22 860 mm)~~ 55 (16 764 mm) above the finished grade or other surface below and that are provided with window fall prevention devices that comply with ASTM F 2006.

Section 1020.1 Construction; add Exception 6 to read as follows:

6. In group B occupancies, corridor walls and ceilings need not be of fire-resistive construction within a single tenant space when the space is equipped with approved automatic smoke-detection within the corridor. The actuation of any detector shall activate self-annunciating alarms audible in all areas within the corridor. Smoke detectors shall be connected to an approved automatic fire alarm system where such system is provided.

Section 1031.2 Reliability; amend to read as follows:

1031.2 Reliability. Required *exit accesses, exits* and *exit discharges* shall be continuously maintained free from obstructions or impediments to full instant use in the case of fire or other emergency ~~when the building area served by the means of egress is occupied~~. An *exit* or *exit passageway* shall not be used for any purpose that interferes with a means of egress.

Section 1103.3 existing elevators; add sentence to end of paragraph as follows:

Provide emergency signage as required by Section 606.3

Section 1103.5.1 Group A: add sentence to read as follows:

Fire sprinkler system installation shall be completed within 24 months from date of notification by the fire code official.

Section 1103.5 Sprinkler systems; add Section 1103.5.5 to read as follows:

1103.5.5 Spray Booths and Rooms. Existing spray booths and spray rooms shall be protected by an approved automatic fire-extinguishing system in accordance with Section 2404.

Section 1103.7 Fire alarm systems; add Section 1103.7.7 and 1103.7.7.1 to read as follows:

1103.7.7 Fire Alarm System Design Standards. Where an existing fire alarm system is upgraded or replaced, the devices shall be addressable. Fire alarm systems utilizing more than 20 smoke and/or heat detectors shall have analog initiating devices.

Exception: Existing systems need not comply unless the total building, or fire alarm system, remodel or expansion exceeds 30% of the building. When cumulative building, or fire alarm system, remodel or expansion initiated after the date of original fire alarm panel installation exceeds 50% of the building, or fire alarm system, the fire alarm system must comply within 18 months of permit application.

1103.7.7.1 Communication requirements. Refer to Section 907.6.6 for applicable requirements.

Section 1203 Emergency and standby power systems; amend and add to read as follows:

1203.1.1 {No change.}

1203.1.2 {No change.}

1203.1.3 Emergency power systems and standby power systems shall be installed in accordance with the *International Building Code*, NFPA 70, NFPA 110 and NFPA 111. Existing installations shall be maintained in accordance with the original approval, except as specified in Chapter 11.

1203.1.4 through 1203.1.9 {No changes to these sections.}

1203.1.10 Critical Operations Power Systems (COPS). For Critical Operations Power Systems necessary to maintain continuous power supply to facilities or parts of facilities that require continuous operation for the reasons of public safety, emergency management, national security, or business continuity, see NFPA 70.

1203.2 Where Required. Emergency and standby power systems shall be provided where required by Sections 1203.2.1 through 1203.2.18 ~~26~~ or elsewhere identified in this code or any other referenced code.

1203.2.1 through 1203.2.3 {No change.}

1203.2.4 Emergency Voice/alarm Communications Systems. Emergency power shall be provided for emergency voice/alarm communications systems in the following occupancies, or as specified elsewhere in this code, as required in Section 907.5.2.2.5. The system shall be capable of powering the required load for a duration of not less than 24 hours, as required in NFPA 72.

Covered and Open Malls, Section 907.2.19 and 914.2.3

Group A Occupancies, Sections 907.2.1 and 907.5.2.2.4.

Special Amusement Buildings, Section 907.2.11

High-rise Buildings, Section 907.2.12

Atriums, Section 907.2.13

Deep Underground Buildings, Section 907.2.18

1203.2.5 through 1203.2.13 {No change.}

1203.2.14 Means of Egress Illumination. Emergency power shall be provided for *means of egress* illumination in accordance with Sections 1008.3 and 1104.5.1. (90 minutes)

1203.2.15 Membrane Structures. Emergency power shall be provided for *exit* signs in temporary tents and membrane structures in accordance with Section 3103.12.6. (90 minutes) Standby power shall be provided for auxiliary inflation systems in permanent membrane structures in accordance with Section 2702 of the *International Building Code*. (4 hours) Auxiliary inflation systems shall be provided in temporary air-supported and air-inflated membrane structures in accordance with section 3103.10.4.

1203.2.16 {No change.}

1203.2.17 Smoke Control Systems. Standby power shall be provided for smoke control systems in the following occupancies, or as specified elsewhere in this code, as required in Section 909.11:

Covered Mall Building, *International Building Code*, Section 402.7

Atriums, *International Building Code*, Section 404.7

Underground Buildings, *International Building Code*, Section 405.8

Group I-3, *International Building Code*, Section 408.4.2

Stages, *International Building Code*, Section 410.2.5

Special Amusement Buildings (as applicable to Group A's), *International Building Code*, Section 411.1

Smoke Protected Seating, Section 1029.6.2.

1203.2.18 {No change.}

1203.2.19 Covered and Open Mall Buildings. Emergency power shall be provided in accordance with Section 907.2.19 and 914.2.3.

1203.2.20 Airport Traffic Control Towers. A standby power system shall be provided in airport traffic control towers more than 65 ft. in height. Power shall be provided to the following equipment:

1. Pressurization equipment, mechanical equipment and lighting.

2. Elevator operating equipment.

3. Fire alarm and smoke detection systems.

1203.2.21 Smokeproof Enclosures and Stair Pressurization Alternative. Standby power shall be provided for smokeproof enclosures, stair pressurization alternative and associated automatic fire detection systems as required by the *International Building Code*, Section 909.20.6.2.

1203.2.22 Elevator Pressurization. Standby power shall be provided for elevator pressurization system as required by the *International Building Code*, Section 909.21.5.

1203.2.23 Elimination of Smoke Dampers in Shaft Penetrations. Standby power shall be provided when eliminating the smoke dampers in ducts penetrating shafts in accordance with the *International Building Code*, Section 717.5.3, exception 2.3.

1203.2.24 Common Exhaust Systems for Clothes Dryers. Standby power shall be provided for common exhaust systems for clothes dryers located in multistory structures in accordance with the *International Mechanical Code*, Section 504.10, Item 7.

1203.2.25 Hydrogen Cutoff Rooms. Standby power shall be provided for mechanical ventilation and gas detection systems of Hydrogen Cutoff Rooms in accordance with the *International Building Code*, Section 421.

1203.2.26 Means of Egress Illumination in Existing Buildings. Emergency power shall be provided for *means of egress* illumination in accordance with Section 1104.5 when required by the fire code official. (90 minutes in I-2, 60 minutes elsewhere.)

1203.3 through 1203.6 {No change.}

1203.7 Energy Time Duration. Unless a time limit is specified by the fire code official, in this chapter or elsewhere in this code, or in any other referenced code or standard, the emergency and standby power system shall be supplied with enough fuel or energy storage capacity for not less than 2-hour full-demand operation of the system.

Exception: Where the system is supplied with natural gas from a utility provider and is approved.

Section 2304.1 Supervision of dispensing; amend to read as follows.

2304.1 Supervision of Dispensing. The dispensing of fuel at motor fuel-dispensing facilities shall be in accordance with the following:

1. Conducted by a qualified attendant; and/or,
2. Shall be under the supervision of a qualified attendant; and/or
3. Shall be an unattended self-service facility in accordance with Section 2304.3.

At any time the qualified attendant of item Number 1 or 2 above is not present, such operations shall be considered as an unattended self-service facility and shall also comply with Section 2304.3.

Section 2401.2 Nonapplicability; delete this section entirely

Section 3103.3.1 Special amusement buildings; delete this section entirely

Table 3206.2 General Fire Protection and Life Safety Requirements, footnote h; amend to read as follows:

h. Where storage areas are protected by either early suppression fast response (ESFR) sprinkler systems or control mode special application sprinklers with a response time index of 50 (m • s) 1/2 or less that are listed to control a fire in the stored commodities with 12 or fewer sprinklers, installed in accordance with NFPA 13, manual smoke and heat vents or manually activated engineered mechanical smoke exhaust systems shall be required within these areas.

Table 3206.2, footnote j; amend and add footnote j to row titled 'High Hazard' and 'Greater than 300,000' to read as follows:

- j. High hazard high-piled storage areas shall not exceed 500,000 square feet. A 2-hour fire wall constructed in accordance with Section 706 of the *International Building Code* shall be used to divide high-piled storage exceeding 500,000 square feet in area.

Section 3310.1 Required access; add sentence to end of paragraph to read as follows:

When fire apparatus access roads are required to be installed for any structure or development, they shall be approved prior to the time of which construction has progressed beyond completion of the foundation of any structure.

Section 5601.1.3 Fireworks; amend to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks are prohibited.

Exceptions:

1. Only when approved fireworks displays, storage and handling are allowed in Section 5604 and 5608,
2. The use of fireworks for approved fireworks displays allowed in Section 5608.

Section 5703.6 Piping systems; add a sentence to read as follows:

5703.6 Piping system. Piping systems, and their component parts, for flammable and combustible liquids shall be in accordance with Sections 5703.6.1 through 5703.6.11. An approved method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.11.4 Leak prevention; add a sentence to read as follows:

Leak prevention for underground tanks shall comply with Sections 5704.2.11.4.1 through 5704.2.11.4.3. An approved method of secondary containment shall be provided for underground tank and piping systems.

Section 5704.2.11.4.2 Leak detection; amend to read as follows:

5704.2.11.4.2 Leak Detection. Underground storage tank systems shall be provided with an *approved* method of leak detection from any component of the system that is designed and installed in accordance with NFPA 30 and as specified in Section 5704.2.11.4.3.

Section 5704.2.11.4 Leak prevention; add Section 5704.2.11.4.3 to read as follows:

5704.2.11.4.3 Observation Wells. Approved sampling tubes of a minimum 4 inches in diameter shall be installed in the backfill material of each underground flammable or combustible liquid storage tank. The tubes shall extend from a point 12 inches below the average grade of the excavation to ground level and shall be provided with suitable surface access caps. Each tank site shall provide a sampling tube at the corners of the excavation with a minimum of 4 tubes. Sampling tubes shall be placed in the product line excavation within 10 feet of the tank excavation and one every 50 feet routed along product lines towards the dispensers, a minimum of two are required.

Section 5707.4 Mobile fueling areas; add paragraph to read as follows:

Mobile fueling sites shall be restricted to commercial, industrial, governmental, or manufacturing, where the parking area having such operations is primarily intended for employee vehicles. Mobile fueling shall be conducted for fleet fueling or employee vehicles only, not the general public. Commercial sites shall be restricted to office-type or similar occupancies that are not primarily intended for use by the public.

Section 6103.2.1 Portable containers; add Section 6103.2.1.8 to read as follows:

6103.2.1.8 Jewelry Repair, Dental Labs and Similar Occupancies. Where natural gas service is not available, portable LP-Gas containers are allowed to be used to supply approved torch assemblies or similar appliances. Such containers shall not exceed 20-pound (9.0 kg) water capacity. Aggregate capacity shall not exceed 60-pound (27.2 kg) water capacity. Each device shall be separated from other containers by a distance of not less than 20 feet.

Section 6104.2 Maximum capacity within established limits, Exception; add an exception 2 to read as follows:

Exceptions:

1. {existing text unchanged}
2. Except as permitted in 308 and 6104.3.2, LP-gas containers are not permitted in residential areas.

Section 6104.3 Container location; add Section 6104.3.3 to read as follows:

6104.3.3 Spas, Pool Heaters, and Other Listed Devices. Where natural gas service is not available, an LP-gas container is allowed to be used to supply spa and pool heaters or other listed devices. Such container shall not exceed 250-gallon water capacity per lot. See Table 6104.3 for location of containers.

Exception: Lots where LP-gas can be off-loaded wholly on the property where the tank is located may install up to 500 gallon above ground or 1,000 gallon underground approved containers.

Section 6107.4 and 6109.13; amend to read as follows:

6107.4 Protecting Containers from Vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with NFPA 58 Section 312.

6109.13 Protection of Containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

Exception: Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.

Appendix B Fire-Flow requirements for buildings Table B105.2; Amend footnote a. to read as follows:

a. The reduced fire-flow shall be not less than 1,500 gallons per minute.

DIVISION 4 RESIDENTIAL CODE

Sec. 3.02.151 - International Residential Code amendments:

The following noted portions of the International Residential Code are hereby amended to read as follows:

Section R102.4 Referenced codes and standards; amend to read as follows:

R102.4 Referenced codes and standards. The *codes*, when specifically adopted, and standards referenced in this *code* shall be considered part of the requirements of this *code* to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2. Whenever amendments have been adopted to the referenced *codes* and standards, each reference to said *code* and standard shall be considered to reference the amendments as well. Any reference made to NFPA 70 or the *Electrical Code* shall mean the *Electrical Code* as adopted.

Section R103 and R103.1; amend to read as follows:

DEPARTMENT OF BUILDING SAFETY Building Inspection Department

R103.1 Creation of enforcement agency. The Department of Building Safety-Building Inspection Department is hereby created and the official in charge thereof shall be known as the *building official*.

Section R104.10.1; Flood Hazard areas; delete this section

Section R105.2; Work exempt from permit: Building: Delete # 1, 2, 3, 5 and 10, re-number as follows

Building:

1. One-story detached accessory structures, provided that the floor area does not exceed 200 square feet (18.58 m²).
2. Fences not over 7 feet (2134 mm) high.

3. ~~Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.~~

4. 1. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.

5. ~~Sidewalks and driveways.~~

6. 2. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

7. 3. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.

8. 4. Swings and other playground equipment.

9. 5. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.

10. ~~Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling do not serve the exit door required by Section R311.4.~~

Section R105.3.1.1 & R106.1.4; delete these sections entirely

Section R106.1 Submittal documents; Add section 106.1.5 to read as follows:

R106.1.5 Information on storm shelters. Construction documents shall include the information required for storm shelters in ICC 500.

Section R108 Fees; add Section 108.7 to read as follows:

R108.7 Re-Inspection Fee. A fee as established by City Council resolution may be charged when:

1. The inspection called for is not ready when inspector arrives; "Not Ready" is defined as being obviously incomplete. (Example; required element is missing, such as brick ties, on framing/brick-tie inspection, no water on DWV water test, HVAC work incomplete, Electrical work incomplete)
2. No building address is clearly posted; Address must be posted to the following minimums: **T-Pole / Plumbing Rough-in:** On T-Pole brace, **Framing/MEP:** Clearly posted on structure, trash container or sign, **Meter Release or other inspection after dry-in:** Permanent address displayed on structure
3. The project fails twice for the same item
4. Failure to maintain erosion control, trash control or tree protection

Any re-inspection fees assessed shall be paid before any more inspections are made on that job site.

Section R202 Definitions; change definition of "Townhouse" and add Storm Shelter to read as follows:

TOWNHOUSE. A single-family dwelling unit constructed in a group of three or more attached units separated by property lines in which each unit extends from foundation to roof and with a *yard* or *public way* on at least two sides.

[BS] STORM SHELTER. A building, structure or portions thereof, constructed in accordance with ICC 500 and designated for use during a severe wind storm event, such as a hurricane or tornado.

Table R301.2 (1) Climatic and geographic design criteria; amend as follows:

Delete remainder of table Manual J Design Criteria and footnote N

GROUND SNOW LOAD	WIND DESIGN				SEISMIC DESIGN CATEGORY ^f	SUBJECT TO DAMAGE FROM			WINTER DESIGN TEMP ^e	ICE BARRIER UNDER- LAYMENT ^h	FLOOD HAZARDS ^g	AIR FREEZING INDEX ⁱ	MEAN ANNUAL TEMP ^j
	SPEED ^d (MPH)	Topographic Effects ^k	Special Wind Region ^L	Windborne Debris Zone ^m		Weathering A	Frost Line Depth ^b	Termite ^c					
5 lb/ft	115 (3 sec- gust)/ 76 fastest mile	No	No	No	A	Moderate	6"	Very Heavy	22° F	No	Local Code	150	64.9° F

Section R302.1 Exterior walls; add exception #6 to read as follows:

Exceptions: {previous exceptions unchanged}

6. Open non-combustible carport structures may be constructed when also approved within adopted ordinances.

Section R302.3 Two-family dwellings; add Exception #3 to read as follows:

Exceptions:

1. {Existing text unchanged}
2. {Existing text unchanged}
3. two-family dwelling units that are also divided by a property line through the structure shall be separated as required for townhouses.

Section R302.5.1 Opening protection; amend to read as follows:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 13/8 inches (35 mm) in thickness, solid or honeycomb core steel doors not less than 13/8 inches (35 mm) thick, or 20-minute fire-rated doors.

Section R303.3 Bathrooms; Exception: amend to read as follows:

Exception: {existing text unchanged} Spaces containing only a water closet or water closet and a lavatory may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

Section R313.2 One and two-family dwellings automatic fire sprinkler systems; amend to read as follows:

An automatic residential fire sprinkler system shall be installed in one-two-family dwelling that are 6000 square feet or greater and in all existing buildings that are enlarged to be 6000 sq. ft. or greater. For the purpose of this provision, Fire Walls, shall not define separate buildings.

Section R315.2.2 Alterations, repairs and additions; amend exception 2 to read as follows:

Exception:

1. {existing text remains}
2. Installation, alteration or repairs of all electrical powered mechanical systems or plumbing appliances.

Section R322 Flood Resistant Construction. Deleted Section

Section 323 Storm Shelters; amend section to read as follows:

R323.1 General. This section applies to storm shelters where constructed as separate detached buildings or where constructed within buildings for the purpose of providing refuge from storms that produce high winds, such as tornados and hurricanes. In addition to other applicable requirements in this code, storm shelters shall be constructed in accordance with ICC-500.

R323.1.1 Sealed documentation. The construction documents for all structural components and impact-protective systems of the storm shelter shall be prepared and sealed by a registered design professional indicating that the design meets the criteria of ICC-500.

Exception: Structural components and impact-protective systems that are listed and labeled as complying with ICC-500.

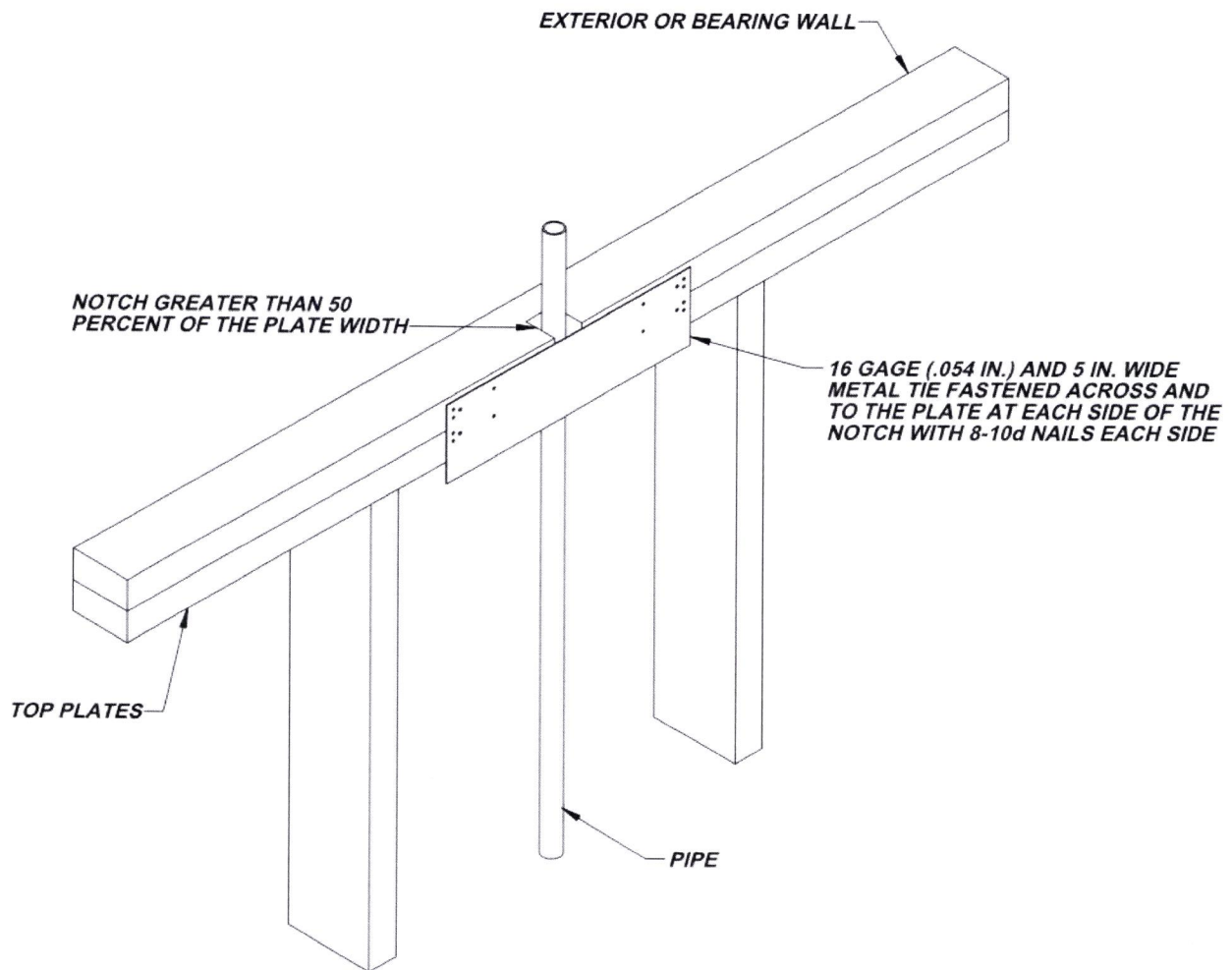
Section R401.2, amended by adding a new paragraph following the existing paragraph to read as follows.

Section R401.2. Requirements. {Existing text unchanged} ... Every foundation and/or footing, or any size addition to an existing post-tension foundation, regulated by this code shall be designed and sealed by a Texas-registered engineer.

Section 602.6.1; amend the following:

R602.6.1 Drilling and notching of top plate. When piping or ductwork is placed in or partly in an exterior wall or interior load-bearing wall, necessitating cutting, drilling or notching of the top plate by more than 50 percent of its width, a galvanized metal tie not less than 0.054 inch thick (1.37 mm) (16 Ga) and ~~1 1/2 inches (38 mm)~~ 5 inches (127 mm) wide shall be fastened across and to the plate at each side of the opening with not less than eight 10d (0.148 inch diameter) having a minimum length of 1 1/2 inches (38 mm) at each side or equivalent. Fasteners will be offset to prevent splitting of the top plate material. The metal tie must extend a minimum of 6 inches past the opening. See figure R602.6.1. {Remainder unchanged}

Figure R602.6.1; delete the figure and insert the following figure:



Section R703.8.4.1; add section R703.8.4.1.2 Veneer ties for wall studs to read as follows:

R704.8.4.1.2 Veneer Ties for wall studs

In stud framed exterior walls, all ties shall be anchored to studs as follows:

1. When studs are 16 in (407 mm) o.c., stud ties shall be spaced no further apart than 24 in (737 mm) vertically starting approximately 12 in (381 mm) from the foundation; or
2. When studs are 24 in (610 mm) o.c., stud ties shall be spaced no further apart than 16 in (483 mm) vertically starting approximately 8 in (254 mm) from the foundation.

Section R902.1; Amend and add exception #5 to read as follows:

R902.1 Roofing covering materials. Roofs shall be covered with materials as set forth in Sections R904 and R905. Class A, B, or C roofing shall be installed ~~in areas designated by law as requiring their use or when the edge of the roof is less than 3 feet from a lot line.~~ {Remainder unchanged}

Exceptions:

1. {Text unchanged}
2. {Text unchanged}
3. {Text unchanged}
4. {Text unchanged}
5. Non-classified roof coverings shall be permitted on one-story detached accessory structures used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed (area defined by jurisdiction).

Section R908.3 Roof replacement; amend to read as follows:

R908.3 Roof replacement. Roof replacement shall include the removal of all existing layers of roof coverings down to the roof deck.

Sections R908.3.1, R908.3.1.1 and R908.4; deleted in its entirety

Chapter 11 [RE] – Energy Efficiency is deleted in its entirety; Reference the 2018 IECC for energy code provisions and recommended amendments

Section M1305.1.2 Appliances in attics; amend to read as follows:

M1305.1.2 Appliances in attics. Attics containing appliances requiring access shall be provided . . . {bulk of paragraph unchanged} . . . sides of the appliance where access is required. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger and large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb. (136 kg) capacity and pulled to the open position prior to inspection for attic access.
3. An access door from an upper floor level.

Exceptions:

1. The passageway and level service space are not required where the appliance can be serviced and removed through the required opening.
2. Where the passageway is unobstructed... {remaining text unchanged}

Section M1411.3 Condensate disposal; change to read as follows:

M1411.3 Condensate disposal. Condensate from all cooling coils or evaporators shall be conveyed from the drain pan outlet to a sanitary sewer through a trap, by means of a direct or indirect drain. {Remaining text unchanged}

Section M1411.3.1 Auxiliary and secondary drain systems, Items 3 and 4; add text to read as follows:

M1411.3.1 Auxiliary and secondary drain systems. {bulk of paragraph unchanged}

1. {text unchanged}

2. {text unchanged}
3. An auxiliary drain pan... {bulk of text unchanged}... with Item 1 of this section. A water level detection device may be installed only with prior approval of the building official.
4. A water level detection device... {bulk of text unchanged}... overflow rim of such pan. A water level detection device may be installed only with prior approval of the building official.

Section M1411.3.1.1 Water-level monitoring devices; add text to read as follows:

M1411.3.1.1 Water-level monitoring devices. On down-flow units ...{bulk of text unchanged}... installed in the drain line. A water level detection device may be installed only with prior approval of the building official.

Section M1503.6 Makeup Air Required; amend and add exception as follows:

M1503.6 Makeup air required. Exhaust hood systems capable of exhausting in excess of 400 cubic feet per minute (0.19 m³/s) shall be provided with makeup air at a rate approximately equal to the difference between the exhaust air rate and 400 cubic feet per minute. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Exception: Where all appliances in the house are of sealed combustion, power-vent, unvented, or electric, the exhaust hood system shall be permitted to exhaust up to 600 cubic feet per minute (0.28 m³/s) without providing makeup air. Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.28 m³/s) shall be provided with a makeup air at a rate approximately equal to the difference between the exhaust air rate and 600 cubic feet per minute.

Section M2005.2 Prohibited locations; amend to read as follows:

M2005.2 Prohibited locations. Fuel-fired water heaters shall not be installed in a room used as a storage closet. Water heaters located in a bedroom or bathroom shall be installed in a sealed enclosure so that *combustion air* will not be taken from the living space. Access to such enclosure may be from the bedroom or bathroom when through a solid door, weather-stripped in accordance with the exterior door air leakage requirements of the International Energy Conservation Code and equipped with an approved self-closing device. Installation of direct-vent water heaters within an enclosure is not required

Section G2408.3 (305.5) Private garages; delete entire section

Section G2415.2.1 (404.2.1) CSST; add a second paragraph and exception to read as follows:

Both ends of each section of medium pressure gas piping shall identify its operating gas pressure with an approved tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING
1/2 to 5 psi gas pressure
Do Not Remove"

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EDH).

Section G2415.12 (404.12) and G2415.12.1 (404.12.1) Minimum burial depth; amend to read as follows:

G2415.12 (404.12) Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 12 inches (305 mm) 18 inches (457 mm) below grade, except as provided for in Section G2415.12.1.

Section G2417.1 (406.1) General; amend to read as follows:

G2417.1 (406.1) General. Prior to acceptance and initial operation, all *pip*ing installations shall be inspected and *pressure tested* to determine that the materials, design, fabrication, and installation practices comply with the requirements of this *code*. The *permit* holder shall make the applicable tests prescribed in Sections 2417.1.1 through 2417.1.5 to determine compliance with the provisions of this *code*. The *permit* holder shall give reasonable advance notice to the *building official* when the *pip*ing system is ready for testing. The *equipment*, material, power and labor necessary for the inspections and test shall be furnished by the *permit* holder and the *permit* holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

Section G2417.4 (406.4) Test pressure measurements; amend to read as follows:

G2417.4 (406.4) Test pressure measurement. Test pressure shall be measured with a manometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the *pressure test* period. The source of pressure shall be isolated before the *pressure tests* are made, gauges used to measure... {remainder unchanged}

Section G2417.4.1 (406.4.1) Test pressure; amend to read as follows:

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 ½”), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Diaphragm gauges used for testing must display a current calibration and be in good working condition. The appropriate test must be applied to the diaphragm gauge used for testing

Section G2417.4.2 Test duration; amend to read as follows:

G2417.4.2 (406.4.2) Test duration. The test duration shall be held for a length of time satisfactory to the *Building Official*, but in no case for less than fifteen (15) minutes. For welded *pip*ing, and for *pip*ing carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the *Building Official*, but in no case for less than thirty (30) minutes.

Section G2420.1 (406.1) General; add Section G2420.1.4 to read as follows:

G2420.1.4 Valves in CSST installations. Shutoff *valves* installed with corrugated stainless steel (CSST) *pip*ing systems shall be supported with an approved termination fitting, or equivalent support, suitable for the size of the *valves*, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the *valve*. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's *pip*ing, fittings, and *valves* between anchors. All *valves* and supports shall be designed and installed so they will not be disengaged by movement of the supporting *pip*ing.

Section G2420.1.1 (409.1.1) Valve approval; Add sentence to paragraph to read as follows:

Section G2420.1.1 (409.1.1) Valve approval. All valves servicing cooktops, stovetops, ranges and ovens shall be approved ANSI Z 21.15 valves with full shut off handles. Keyed/handleless (Clive) valves will not be allowed for the appliances mentioned only.

Section G2420.1.3 (409.1.3) Access to shutoff valves; Add sentence to paragraph to read as follows:

Section G2420.1.3 (409.1.3) Access to shutoff valves. Shutoff valves for cooktops, stovetops, ovens and ranges shall be readily accessible unless approved by Building Official or Chief Building Inspector on per case basis.

Section G2420.5.1 (409.5.1) Located within same room; add text to read as follows:

G2420.5.1 (409.5.1) Located within the same room. The shutoff valve *{bulk of paragraph unchanged}*... in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

Section G2421.1 (410.1) Pressure regulators; add text and Exception to read as follows:

G2421.1 (410.1) Pressure regulators. A line pressure regulator shall be ... *{bulk of paragraph unchanged}*... approved for outdoor installation. Access to regulators shall comply with the requirements for access to appliances as specified in Section M1305.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

Section G2422.1.2.3 (411.1.3.3) Prohibited locations and penetrations; delete Exception 1 and Exception 4.

Section G2445.2 (621.2) Prohibited use; add Exception to read as follows:

G2445.2 (621.2) Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented room heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Building Official unless an unsafe condition is determined to exist as described in International Fuel Gas Code Section 108.7 of the Fuel Gas Code.

Section G2448.1.1 (624.1.1) Installation requirements; amend to read as follows:

G2448.1.1 (624.1.1) Installation requirements. The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with this code

Section P2603; amend to read as follows:

P2603.3 Protection against corrosion. Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

Section P2603.5.1 Sewer Depth; change to read as follows:

P2603.5.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (304 mm) below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

Section P2604; add section 2604.2.1 Plastic sewer and DWV piping installation to read as follows:

P2604.2.1 Plastic sewer and DWV piping installation. Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer's installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

P2605.1 General; add text and #5 to list:

P2605.1 General. Piping and expansion tanks ... remainder unchanged...

5. Thermal expansion tanks shall be supported to not allow sagging, hangers and anchors shall be of sufficient strength to support tanks and attached to building construction in an approved manner.

Section P2801.6 Required pan; amend to read as follows:

P2801.6 Required pan.

Where a storage tank-type water heater or a hot water storage tank is installed in a location where water leakage from the tank will cause damage, the tank shall be installed in a pan constructed of one of the following:

1. Galvanized steel or aluminum of not less than 0.0236 inch (0.6010 mm) in thickness.
2. Plastic not less than 0.036 inch (0.9 mm) in thickness.
3. Other *approved* materials.

~~A plastic pan beneath a gas-fired water heater shall be constructed of material having a flame spread index of 25 or less and a smoke developed index of 450 or less when tested in accordance with ASTM E84 or UL 723.~~

Section P2801.6.1 Pan size and drain; amend to read as follows:

Section P2801.6.1 Pan Size and drain. The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

Section P2801.7; amend Exceptions to read as follows:

Exceptions:

1. Elevation of the ignition source is not required for appliances that are *listed* as flammable vapor ignition resistant
2. Electric Water Heater

Section P2804.6.1 Requirements for discharge piping; amend to read as follows:

Section P2804.6.1 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap ~~located in the same room as the water heater.~~
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

5. Discharge ~~to the floor~~, to an indirect waste receptor or to the outdoors.

[remainder unchanged]

Section P2902.5.3; amend to read as follows:

P2902.5.3 Lawn irrigation systems. The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

Section P3009.9 Solvent cementing; amend to read as follows:

P3003.9. Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

Section P3111Combination waste and vent system; delete section entirely

Section P3112.2 Vent connection; delete and replace with the following:

P3112.2 Vent connection. Traps for island sinks and similar equipment shall be roughed in above the floor and may be vented by extending the vent as high as possible, but not less than the drain board height and then returning it downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. The return vent shall be connected to the horizontal drain through a wye-branch fitting and shall, in addition, be provided with a foot vent taken off the vertical fixture vent by means of a wye-branch immediately below the floor and extending to the nearest partition and then through the roof to the open air or may be connected to other vents at a point not less than six (6) inches (152 mm) above the flood level rim of the fixtures served. Drainage fittings shall be used on all parts of the vent below the floor level and a minimum slope of one-quarter (1/4) inch per foot (20.9 mm/m) back to the drain shall be maintained. The return bend used under the drain board shall be a one (1) piece fitting or an assembly of a forty-five (45) degree (0.79 radius), a ninety (90) degree (1.6 radius) and a forty-five (45) degree (0.79 radius) elbow in the order named. Pipe sizing shall be as elsewhere required in this Code. The island sink drain, upstream of the return vent, shall serve no other fixtures. An accessible cleanout shall be installed in the vertical portion of the foot vent.

DIVISION 5 MECHANICAL CODE

Sec. 3.02.201- International Mechanical Code amendments:

The following noted portions of the International Mechanical Code are hereby amended to read as follows

Section 102.8; amend to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced herein shall be those that are listed in Chapter 15 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC *Electrical Code* shall mean the Electrical Code as adopted.

Section 306.3 Appliances in attic; amend to read as follows:

306.3 Appliances in attics. Attics containing appliances requiring *access* shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the appliance. The clear *access* opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest appliance. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb. (136 kg) capacity and pulled to the open position prior to inspection for attic access.
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed... *{remainder of section unchanged}*

Section 306.5 Equipment and appliances on roofs or elevated structures; amend to read as follows:

306.5 Equipment and appliances on roofs or elevated structures. . Where *equipment* requiring *access* or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliances' level service space. Such access shall . . . *{bulk of section to read the same}* . . . on roofs having a slope greater than 4 unit's vertical in 12 unit's horizontal (33-percent slope)..... *{Bulk of section to read the same}*.

Section 306.5.1 Sloped roofs; amend to read as follows:

306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on roofs having slopes greater than 4 units vertical in 12 units horizontal and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the International Building Code.

Section 306 Access and service space; add Section 306.6 to read as follows:

306.6 Water heaters above ground or floor. When the mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

Section 307.2.3 Auxiliary and secondary drain system; amend item 2 to read as follows:

2. A separate overflow drain line shall be connected to the drain pan provided with the equipment. Such overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection. However, the conspicuous point shall not create a hazard such as dripping over a walking surface or other areas so as to create a nuisance.

Section 403.2.1 Recirculation of air; add an item 5 to read as follows:

5. Toilet rooms within private dwellings that contain only a water closet, lavatory or combination thereof may be ventilated with an approved mechanical recirculating fan or similar device designed to remove odors from the air.

Section 501.3 Exhaust discharge; add an exception to read as follows:

501.3 Exhaust Discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in Section 501.3.1. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic, crawl space, or be directed onto walkways.

Exceptions:

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of dwelling units having private attics.
2. Commercial cooking recirculating systems.
3. Where installed in accordance with the manufacturer's instructions and where mechanical or natural ventilation is otherwise provided in accordance with Chapter 4, listed and labeled domestic ductless range hoods shall not be required to discharge to the outdoors.
4. Toilet room exhaust ducts may terminate in a warehouse or shop area when infiltration of outside air is present.

Section 607.5.1 Fire walls; amend to read as follows:

607.5.1 Fire Walls. Ducts and air transfer openings permitted in fire walls in accordance with Section 705.11 of the International Building Code shall be protected with listed fire dampers installed in accordance with their listing. For hazardous exhaust systems see Section 510.1-510.9 IMC.

DIVISION 6 FUEL GAS CODE

Sec. 3.02.251 - International Fuel Gas Code amendments:

The following noted portions of the International Fuel Gas Code are hereby amended to read as follows

Section 102.2 Existing installations; add an exception to read as follows:

Exception: Existing dwelling units shall comply with Section 621.2.

Section 102.8 Referenced codes and standards; amend to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 8 and such codes, when specifically adopted, and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC Electrical Code shall mean the Electrical Code as adopted.

Section 306.3 Appliances in attic; amend to read as follows:

[M] 306.3 Appliances in attics. Attics containing appliances requiring *access* shall be provided . . . *{bulk of paragraph unchanged}* . . . side of the *appliance*. The clear *access* opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions are not large enough to allow removal of the largest *appliance*. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb. (136 kg) capacity and pulled to the open position prior to inspection for attic access
4. An access door from an upper floor level.
5. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the *appliance* is capable of being serviced and removed through the required opening.
2. Where the passageway is not less than *{bulk of section to read the same}*.

Section 306.5 Equipment and appliances on roofs or elevated structures; amend to read as follows:

[M] 306.5 Equipment and appliances on roofs or elevated structures. Where *equipment* requiring *access* or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 16 feet (4877 mm) above grade to access, an a permanent interior or exterior means of access shall be provided. Permanent exterior ladders providing roof access need not extend closer than 12 feet (2438 mm) to the finish grade or floor level below and shall extend to the equipment and appliances' level service space. Such access shall . . . {bulk of section to read the same} . . . on roofs having a slope greater than 4 unit's vertical in 12 unit's horizontal (33-percent slope)..... {Bulk of section to read the same}.

Section 306.5.1 Sloped roofs; amend to read as follows:

[M] 306.5.1 Sloped roofs. Where appliances, *equipment*, fans or other components that require service are installed on roofs having slopes greater than 4 units vertical in 12 units horizontal and having an edge more than 30 inches (762 mm) above grade at such edge, a catwalk at least 16 inches in width with substantial cleats spaced not more than 16 inches apart shall be provided from the roof access to a level platform at the appliance. The level platform shall be provided on each side of the appliance to which access is required for service, repair or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere and shall comply with the loading requirements for guards specified in the International Building Code.

Section 306 Access and service space; add Section 306.7 with exception and subsection 306.7.1 to read as follows:

306.7 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger when approved by the *code official*) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

Section 401.5 Identification; add a second paragraph to read as follows:

Both ends of each section of medium pressure corrugated stainless steel tubing (CSST) shall identify its operating gas pressure with an *approved* tag. The tags are to be composed of aluminum or stainless steel and the following wording shall be stamped into the tag:

"WARNING
1/2 to 5 psi gas pressure
Do Not Remove"

Section 402.3 Sizing; add an exception to read as follows:

Exception: Corrugated stainless steel tubing (CSST) shall be a minimum of 1/2" (18 EHD).

Section 404.12 Minimum burial depth; amend to read as follows:

404.12 Minimum burial depth. Underground piping systems shall be installed a minimum depth of 18 inches (458 mm) top of pipe below grade.

Section 404.12.1 Individual outside appliances; amend to read as follows:

404.12.1 Individual outside appliances. Individual lines to outside lights, grills or other appliances shall be installed a minimum of 12 inches (203 mm) top of pipe below finished grade, provided that such installation is approved and is installed in locations not susceptible to physical damage.

Section 406.1 General; amend to read as follows:

406.1 General. Prior to acceptance and initial operation, all piping installations shall be inspected and pressure tested to determine that the materials, design, fabrication, and installation practices comply with the requirements of this code. The permit holder shall make the applicable tests prescribed in Sections 406.1.1 through 406.1.5 to determine compliance with the provisions of this code. The permit holder shall give reasonable advance notice to the code official when the piping system is ready for testing. The equipment, material, power and labor necessary for the inspections and test shall be furnished by the permit holder and the permit holder shall be responsible for determining that the work will withstand the test pressure prescribed in the following tests.

Section 406.4 Test pressure measurement; amend to read as follows:

406.4 Test pressure measurement. Test pressure shall be measured with a monometer or with a pressure-measuring device designed and calibrated to read, record, or indicate a pressure loss caused by leakage during the pressure test period. The source of pressure shall be isolated before the pressure tests are made.

Section 406.4.1 Test pressure; amend to read as follows:

406.4.1 Test pressure. The test pressure to be used shall be no less than 3 psig (20 kPa gauge), or at the discretion of the Code Official, the piping and valves may be tested at a pressure of at least six (6) inches (152 mm) of mercury, measured with a manometer or slope gauge. For tests requiring a pressure of 3 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one half inches (3 ½”), a set hand, 1/10 pound incrementation and pressure range not to exceed 6 psi for tests requiring a pressure of 3 psig. For tests requiring a pressure of 10 psig, diaphragm gauges shall utilize a dial with a minimum diameter of three and one-half inches (3 ½”), a set hand, a minimum of 2/10 pound incrementation and a pressure range not to exceed 20 psi. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa) (1/2 psi) and less than 200 inches of water column pressure (52.2 kPa) (7.5 psi), the test pressure shall not be less than ten (10) pounds per square inch (69.6 kPa). For piping carrying gas at a pressure that exceeds 200 inches of water column (52.2 kPa) (7.5 psi), the test pressure shall be not less than one and one-half times the proposed maximum working pressure.

Section 406.4.2 Test duration; change to read as follows:

406.4.2 Test duration. Test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than fifteen (15) minutes. For welded piping, and for piping carrying gas at pressures in excess of fourteen (14) inches water column pressure (3.48 kPa), the test duration shall be held for a length of time satisfactory to the Code Official, but in no case for less than thirty (30) minutes. *(Delete remainder of section.)*

Section 409.1 Valve approval; add Section 409.1.4 to read as follows:

409.1.4 Valves in CSST installations. Shutoff valves installed with corrugated stainless steel (CSST) piping systems shall be supported with an *approved* termination fitting, or equivalent support, suitable for the size of the valves, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration but in no case greater than 12-inches from the center of the valve. Supports shall be installed so as not to interfere with the free expansion and contraction of the system's piping, fittings, and valves between anchors. All valves and supports shall be designed and installed so they will not be disengaged by movement of the supporting piping.

Section 409.1.1 Valve approval; add sentence to paragraph to read as follows:

Section 409.1.1 Valve approval. All valves servicing cooktops, stovetops, ranges and ovens shall be approved ANSI Z 21.15 valves with full shut off handles. Keyed/handleless (Clive) valves will not be allowed for the appliances mentioned only.

Section 409.1.3 Access to shutoff valves; Add sentence to paragraph to read as follows:

Section 409.1.3 Access to shutoff valves. Shutoff valves for cooktops, stovetops, ovens and ranges shall be readily accessible unless approved by Building Official or Chief Building Inspector on per case basis.

Section 409.5.1 Located within same room; add text to read as follows:

Section 409.5.1 Located within the same room. The shutoff valve *{bulk of paragraph unchanged}*... in accordance with the appliance manufacturer's instructions. A secondary shutoff valve must be installed within 3 feet (914 mm) of the firebox if appliance shutoff is located in the firebox.

Section 410.1 Pressure regulators; add a second paragraph and exception to read as follows:

Access to regulators shall comply with the requirements for access to appliances as specified in Section 306.

Exception: A passageway or level service space is not required when the regulator is capable of being serviced and removed through the required attic opening.

Section 621.2 Prohibited use; add exception as follows:

621.2 Prohibited use. One or more unvented room heaters shall not be used as the sole source of comfort heating in a dwelling unit.

Exception: Existing approved unvented heaters may continue to be used in dwelling units, in accordance with the code provisions in effect when installed, when approved by the Code Official unless an unsafe condition is determined to exist as described in Section 108.7.

Section 624.1.1 Installation requirements; amend to read as follows:

624.1.1 Installation requirements. The requirements for water heaters relative to access, sizing, relief valves, drain pans and scald protection shall be in accordance with the *International Plumbing Code*.

DIVISION 7 PLUMBING CODE

Sec. 3.02.301 - International Plumbing Code amendments:

The following noted portions of the International Plumbing Code are hereby amended to read as follows

Table of Contents, Chapter 7, Section 714; amend to read as follows:

714 Engineered Drainage Design.....69

Section 102.8 referenced codes and standards; amend to read as follows:

102.8 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Chapter 13 and such codes, when specifically adopted, and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference. Where the differences occur between provisions of this code and the referenced standards, the provisions of this code shall be the minimum requirements. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Any reference to NFPA 70 or the ICC Electrical Code shall mean the Electrical Code as adopted.

Sections 106.6.2 Fee schedule and 106.6.3 fee refunds; amend to read as follows:

106.6.2 Fee schedule. The fees for all plumbing work shall be as adopted by resolution of the governing body of the jurisdiction.

106.6.3 Fee Refunds. The code official shall establish a policy for-authorizing the refunding of fees.. *{Delete balance of section}*

Section 109 Means of Appeal; Delete entire section and insert the following:

**SECTION 109
MEANS OF APPEAL**

109.1 Application for appeal. Any person shall have the right to appeal a decision of the code official to the board of appeals established by ordinance. The board shall be governed by the enabling ordinance.

Section 305.1; amend to read as follows:

305.1 Protection against contact. Metallic piping, except for cast iron, ductile iron and galvanized steel, shall not be placed in direct contact with steel framing members, concrete or cinder walls and floors or other masonry. Metallic piping shall not be placed in direct contact with corrosive soil. Where sheathing is used to prevent direct contact, the

sheathing shall have a thickness of not less than 0.008 inch (8 mil) (0.203 mm) and the sheathing shall be made of approved material. Where sheathing protects piping that penetrates concrete or masonry walls or floors, the sheathing shall be installed in a manner that allows movement of the piping within the sheathing.

Section 305.4.1 sewer depth; amend to read as follows:

305.4.1 Sewer depth. Building sewers that connect to private sewage disposal systems shall be a minimum of 12 inches (304 mm) below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 12 inches (304 mm) below grade.

Section 305.7 Protection of components of plumbing system; amend to read as follows:

305.7 Protection of components of plumbing system. Components of a plumbing system installed within 3 feet along alleyways, driveways, parking garages or other locations in a manner in which they would be exposed to damage shall be recessed into the wall or otherwise protected in an *approved* manner.

Section 306.2 Trenching and bedding; add section 306.4 to read as follows:

306.2.4 Plastic sewer and DWV piping installation. Plastic sewer and DWV piping installed underground shall be installed in accordance with the manufacturer's installation instructions. Trench width shall be controlled to not exceed the outside the pipe diameter plus 16 inches or in a trench which has a controlled width equal to the nominal diameter of the diameter of the piping multiplied by 1.25 plus 12 inches. The piping shall be bedded in 4 inches of granular fill and then backfilled compacting the side fill in 6-inch layers on each side of the piping. The compaction shall be to minimum of 85 percent standard proctor density and extend to a minimum of 6 inches above the top of the pipe.

Section 314.2.1 Condensate disposal; amend to read as follows:

314.2.1 Condensate disposal. Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an *approved* place of disposal. ... {text unchanged} ... Condensate shall not discharge into a street, alley, sidewalk, roof-top, or other areas so as to cause a nuisance.

Section 401.1 Scope; add a sentence to read as follows:

401.1 Scope. This chapter shall govern the materials, design and installation of plumbing fixtures, faucets and fixture fittings in accordance with the type of *occupancy*, and shall provide for the minimum number of fixtures for various types of occupancies. The provisions of this Chapter coordinate with the provisions of the *Building Code*. Should any conflicts arise between the two chapters, the *Code Official* shall determine which provision applies.

Section 409.2 Water connection; amend to read as follows:

409.2 Water connection. The water supply to a commercial dishwashing machine shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608. (Remainder of section unchanged)

Section 412.4 Public laundries and central washing facilities; amend to read as follows:

412.4 Required location for floor drains ~~Public laundries and central washing facilities~~. Floor drains shall be installed in the following areas.

1. In public coin-operated laundries and in the central washing facilities of multiple family dwellings, the rooms containing automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area. Such drains shall have a minimum outlet of not less than 3 inches (76 mm) in diameter.

2. Commercial kitchens. In lieu of floor drains in commercial kitchens, the code official may accept floor sinks.
3. Public restrooms.

Section 502.3 Water heaters installed in attic; amend to read as follows:

502.3 Appliances in attics. Attics containing a water heater shall be provided . . . {bulk of paragraph unchanged} . . . side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), or larger where such dimensions be not less than 20 inches by 30 inches(508mm by 762mm) where such dimensions are large enough to allow removal of the water heater. A walkway to an appliance shall be rated as a floor as approved by the building official. As a minimum, for access to the attic space, provide one of the following:

1. A permanent stair.
2. A pull down stair with a minimum 300 lb (136 kg) capacity and pulled down in open position prior to inspection for attic access
3. An access door from an upper floor level.
4. Access Panel may be used in lieu of items 1, 2, and 3 with prior approval of the code official due to building conditions.

Exceptions:

1. The passageway and level service space are not required where the appliance is capable of being serviced and removed... {remainder of section unchanged}

Section 502 Installation; Add Section 502.6 to read as follows:

502.6 Water heaters above ground or floor. When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight (8) feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

Exception: A max 10 gallon water heater (or larger with approval) is capable of being accessed through a lay-in ceiling and a water heater is installed is not more than ten (10) feet (3048 mm) above the ground or floor level and may be reached with a portable ladder.

Section 504.6 Requirements for discharge piping; change to read as follows:

504.6 Requirements for discharge piping. The discharge piping serving a pressure relief valve, temperature relief valve or combination thereof shall:

1. Not be directly connected to the drainage system.
2. Discharge through an air gap. ~~located in the same room as the water heater.~~
3. Not be smaller than the diameter of the outlet of the valve served and shall discharge full size to the air gap.
4. Serve a single relief device and shall not connect to piping serving any other relief device or equipment.

Exception: Multiple relief devices may be installed to a single T & P discharge piping system when approved by the administrative authority and permitted by the manufacture's installation instructions and installed with those instructions.

5. Discharge to an approved location or to the outdoors.

6. Discharge in a manner that does not cause personal injury or structural damage.
7. Discharge to a termination point that is readily observable by the building occupants.
8. Not be trapped.
9. Be installed so as to flow by gravity.
10. Terminate not more than 6 inches above and not less than two times the discharge pipe diameter above the floor or flood level rim of the waste receptor.
11. Not have a threaded connection at the end of such piping.
12. Not have valves or tee fittings.
13. Be constructed of those materials listed in Section 605.4 or materials tested, rated and *approved* for such use in accordance with ASME A112.4.1.
14. Be one nominal size larger than the size of the relief valve outlet, where the relief valve discharge piping is installed with insert fittings. The outlet end of such tubing shall be fastened in place

Section 504.7.1 Pan size and drain; amend to read as follows:

Section 504.7.1 Pan size and drain. The pan shall be not less than 1 1/2 inches (38 mm) in depth and shall be of sufficient size and shape to receive all dripping or condensate from the tank or water heater. The pan shall be drained by an indirect waste pipe having a diameter of not less than 3/4 inch (19 mm). Piping for safety pan drains shall be of those materials listed in Table 605.4. Multiple pan drains may terminate to a single discharge piping system when approved by the administrative authority and permitted by the manufactures installation instructions and installed with those instructions.

Section 604.4 Maximum flow and water consumption; add Section 604.4.1 to read as follows:

604.4.1 State maximum flow rate. Where the State mandated maximum flow rate is more restrictive than those of this section, the State flow rate shall take precedence.

Section 604.8 Water pressure-reducing valve or regulator; add Section 604.8.3 and section 604.8.3.1 to read as follows:

604.8.3 Thermal expansion control. An expansion tank or approved device shall be installed for the water heater with the addition of a pressure reducing valve or regulator creating a closed system.

604.8.3.1 Thermal expansion tank support. Thermal expansion tanks shall be supported to not allow sagging, hangers and anchors shall be of sufficient strength to support tanks and attached to building construction in an approved manner.

Section 606.1 Location of full open valves; delete items #4 and #5.

Section 606.2 Location of shutoff valves; amend to read as follows:

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

1. On the fixture supply to each plumbing fixture other than bathtubs and showers in one- and two-family residential occupancies, and other than in individual sleeping units that are provided with unit shutoff valves in hotels, motels, boarding houses and similar occupancies.
2. On the water supply pipe to each appliance or mechanical equipment.

Section 608.1 General; amend to read as follows:

608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to applicable local regulations, Table 608.1, and as specifically stated in Sections 608.2 through 608.16.10.

Section 608.17.5 Connections to lawn irrigation systems; amend to read as follows:

608.17.5 Connections to lawn irrigation systems.

The potable water supply to lawn irrigation systems shall be protected against backflow by an atmospheric-type vacuum breaker, a pressure-type vacuum breaker, a double-check assembly or a reduced pressure principle backflow preventer. A valve shall not be installed downstream from an atmospheric vacuum breaker. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer.

Section 608.18 Protection of individual water supplies; amend to read as follows:

608.18 Protection of individual water supplies. An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with applicable local regulations. Installation shall be in accordance with Sections 608.17.1 through 608.17.8.

Section 703.6 Combined sanitary and storm public sewer; Delete entire section

Section 704 Drainage piping installation; add section 704.5 to read as follows:

704.5 Single stack fittings. Single stack fittings with internal baffle, PVC schedule 40 or cast iron single stack shall be designed by a registered engineer and comply to a national recognized standard

Section 705.10.2 Solvent cementing; amend to read as follows:

705.10.2 Solvent cementing. Joint surfaces shall be clean and free from moisture. A purple primer that conforms to ASTM F 656 shall be applied. The joint shall be made while the cement is wet and shall be in accordance with ASTM D 2855. Solvent cement joints shall be permitted above or below ground.

Section 712 Sumps and ejectors; add Section 712.5 to read as follows:

712.5 Dual Pump System. All sumps shall be automatically discharged and, when in any "public use" occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.

Section 713 Computerized drainage design and 713.1 design of drainage system; amend to read as follows:

**SECTION 713
ENGINEERED DRAINAGE DESIGN**

713.1 Design of drainage system. The sizing, design and layout of the drainage system shall be designed by a registered engineer using approved design methods.

Section 803 Special waste; add section 803.3 to read as follows:

803.3 Special waste pipe, fittings, and components. Pipes, fittings, and components receiving or intended to receive the discharge of any fixture into which acid or corrosive chemicals are placed shall be constructed of CPVC, high silicone iron, PP, PVDF, chemical resistant glass, or glazed ceramic materials

Section 903.1 Roof extension; amend to read as follows:

903.1 Roof extension. All open vent pipes that extend through a roof shall be terminated at least six (6) inches (152 mm) above the roof, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet (2134 mm) above the roof.

Section 918.3; amend to read as follows.

918.3 Where permitted. Individual, branch and circuit vents shall be permitted to terminate with a connection to an individual or branch-type air admittance valve in accordance with Section 918.3.1. Stack vents and vent stacks shall be permitted to terminate to stack-type air admittance valves in accordance with Section 918.3.2. Air admittance valves shall only be installed with the prior approval of the building official.

Section 1106.1 General; amend to read as follows:

1106.1 General. The size of the vertical conductors and leaders, building storm drains, building storm sewers, and any horizontal branches of such drains or sewers shall be based on six (6) inches per hour rainfall rate.

Section 1108.3 Sizing of secondary drains; amend to read as follows:

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106 Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system.

Section 1109 Controlled flow roof drain systems; Delete entire section

Section 1202.1 Nonflammable medical gases; delete Exception 1 and 2:

DIVISION 8 NATIONAL ELECTRIC CODE

Sec. 3.02.351 - National Electrical Code amendments:

The following noted portions of the National Electrical Code are hereby amended to read as follows

Article 100 Definitions; add the following to definitions:

Engineering Supervision: Supervision by a Qualified State of Texas Licensed Professional Engineer engaged primarily in the design or maintenance of electrical installations.

Article 100; amend the following definition to read as follows:

Intersystem Bonding Termination. A device that provides a means for connecting intersystem bonding conductors for communication systems to the grounding electrode system.

Article 110.2 Approval; amend the following to read as follows:

110.2 Approval. The conductors and equipment required or permitted by this *Code* shall be acceptable only if approved. Approval of equipment may be evident by listing and labeling of equipment by a Nationally Recognized Testing Lab (NRTL) with a certification mark of that laboratory or a qualified third party inspection agency approved by the AHJ.

Exception: Unlisted equipment that is relocated to another location within a jurisdiction or is field modified is subject to the approval by the AHJ. This approval may be by a field evaluation by a NRTL or qualified third party inspection agency approved by the AHJ.

Informational Note No. 1: See 90.7, Examination of Equipment for Safety, and 110.3, Examination, Identification, Installation, and Use of Equipment. See definitions of *Approved*, *Identified*, *Labeled*, and *Listed*.

Informational Note No. 2: Manufacturer's self-certification of equipment may not necessarily comply with US product safety standards as certified by a Nationally Recognized Testing Lab

Informational Note No. 3: NFPA 790 and 791 provide an example of an approved method for qualifying a third party inspection agency.

Article 210.52(G) (1) Garages: amend the following to read as follows:

(1) Garages. In each attached garage and in each detached garage with electric power. At least one receptacle outlet shall be installed for each car space.

Article 500.8 (A) (3) Equipment; amend to read as follows:

500.8 Equipment. Articles 500 through 504 require equipment construction and installation that ensure safe performance under conditions of proper use and maintenance.

Informational Note No. 1: It is important that inspection authorities and users exercise more than ordinary care with regard to installation and maintenance.

Informational Note No. 2: Since there is no consistent relationship between explosion properties and ignition temperature, the two are independent requirements.

Informational Note No. 3: Low ambient conditions require special consideration. Explosion proof or dust-ignition proof equipment may not be suitable for use at temperatures lower than -25°C (-13°F) unless they are identified for low-temperature service. However, at low ambient temperatures, flammable concentrations of vapors may not exist in a location classified as Class I, Division 1 at normal ambient temperature.

(A) Suitability. Suitability of identified equipment shall be determined by one of the following:

- (1) Equipment listing or labeling
- (2) Evidence of equipment evaluation from a qualified testing laboratory or inspection agency concerned with product evaluation
- (3) Evidence acceptable to the authority having jurisdiction such as a manufacturer's self-evaluation or an engineering judgment signed and sealed by a qualified licensed Professional Engineer in the State of Texas.

Informational Note: Additional documentation for equipment may include certificates demonstrating compliance with applicable equipment standards, indicating special conditions of use, and other pertinent information.

Article 505.7 (A) Implementation of Zone classification systems; amend to read as follows:

- (A) **Implementation of Zone Classification System.** Classification of areas, engineering and design, selection of equipment and wiring methods, installation, and inspection shall be performed by a qualified licensed Professional Engineer in the State of Texas.

Article 517.31 (G) Coordination; amend to read as follows:

(G) Coordination. Overcurrent protective devices serving the equipment branch of the essential electrical system shall be coordinated for the period of time that a fault's duration extends beyond 0.1 second.

Exception No. 1: Between transformer primary and secondary overcurrent protective devices, where only one overcurrent protective device or set of overcurrent protective devices exists on the transformer secondary.

Exception No. 2: Between overcurrent protective devices of the same size (ampere rating) in series.

Informational Note: The terms coordination and coordinated as used in this section do not cover the full range of overcurrent conditions.

Article 600.6(A) (1) At Point of Entry to a Sign; Exception 1; amend to read as follows:

Exception No.1: A disconnect shall not be required for branch circuits(s) or feeder conductor(s) passing through the sign where enclosed in a Chapter 3 listed raceway or metal-jacketed cable identified for the location. The conductor(s) shall not serve the sign body or sign enclosure where passing through.

Article 600.6(A) (1) At Point of Entry to a Sign; add new Exception No. 3 to read as follows:

Exception No. 3: A disconnect shall not be required at the point of entry to a sign body, sign enclosure, or pole for branch circuit conductor(s). The conductor(s) shall be enclosed in a Chapter 3 listed raceway or metal-jacketed cable identified for location. The conductor(s) shall be routed to a device box which contains the disconnect. A field applied permanent warning label that is visible during servicing shall be applied to the raceway at or near the point of entry into the sign enclosure or sign body. The warning label shall comply with 110.21(B) and state the following, "Danger – this raceway contains energized conductors". The marking shall include the location of the disconnecting means for energized conductor(s). The disconnecting means shall be capable of being locked in the open position in accordance with 110.25.

Article 680.25(A) Feeders; amend to read as follows; delete the exception

680.25 Feeders.

These provisions shall apply to any feeder on the supply side of panel boards supplying branch circuits for pool equipment covered in Part II of this article and on the load side of the service equipment or the source of a separately derived system.

(A) Wiring Methods.

Feeders shall be installed in rigid metal conduit, intermediate metal conduit. The following wiring methods shall be permitted if not subject to physical damage:

- (1) Liquid tight flexible nonmetallic conduit
- (2) Rigid polyvinyl chloride conduit
- (3) Reinforced thermosetting resin conduit
- (4) Electrical metallic tubing where installed on or in a building
- (5) Electrical nonmetallic tubing where installed within a building
- (6) Type MC Cable where installed within a building and if not subject to corrosive environment

DIVISION 9 ENERGY CONSERVATION CODE

Sec. 3.02.401 - International Energy Conservation Code amendments:

The following noted portions of the International Energy Conservation Code are hereby amended to read as follows

Section C102/R102 General; add Section C102.1.2 and R102.1.2 (N1101.4.1) to read as follows:

C102.1.2 Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance.

R102.1.2 (N1101.4.1) Alternative compliance. A building certified by a national, state, or local accredited energy efficiency program and determined by the Energy Systems Laboratory to be in compliance with the energy efficiency requirements of this section may, at the option of the Code Official, be considered in compliance. The United States Environmental Protection Agency's Energy Star Program certification of energy code equivalency shall be considered in compliance. Regardless of the program or the path to compliance, each 1- and 2-family dwelling shall be tested for air and duct leakage as prescribed in Section R402.4.1.2 (N1102.4.1.2) and R403.3.3 (N1103.3.3) respectively.

Section C202 and R202; add the following definition:

PROJECTION FACTOR. The ratio of the horizontal depth of the overhang, eave or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave or permanently attached shading device.

DYNAMIC GLAZING. Any fenestration product that has the fully reversible ability to change its performance properties, including *U*-factor, solar heat gain coefficient (SHGC), or visible transmittance (VT).

Table 402.1.2 (N1102.1.2) INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT; the Fenestration U-factor for Climate Zone 3 is amended as follows:

CLIMATE ZONE	FENESTRATION U-FACTOR
3	<u>0.35</u>

Table 402.1.4 (N1102.1.4) EQUIVALENT U-FACTORS; the Fenestration U-factor for Climate Zone 3 is amended as follows:

CLIMATE ZONE	FENESTRATION U-FACTOR
3	<u>0.35</u>

Section C402.2/R402.2; Add Section C402.2.7 and R402.2.14 to read as follows:

Section C402.2.7/R402.2.14 Insulation installed in walls. To insure that insulation remains in place, insulation batts installed in walls shall be totally secured by an enclosure on all sides consisting of framing lumber, gypsum, sheathing, wood structural panel sheathing, netting or other equivalent material approved by the building official.

Section R402.3.2 Glazed fenestration SHGC; amend by adding a paragraph and table following the exception to read as follows:

Where vertical fenestration is shaded by an overhang, eave, or permanently attached shading device, the SHGC required in Table R402.1.2 shall be reduced by using the multipliers in Table R402.3.2 SHGC Multipliers for Permanent Projections.

Table R402.3.2 SHGC Multipliers for Permanent Projections ^a

Projection Factor	SHGC Multiplier (all Other Orientation)	SHGC Multiplier (North Oriented)
0 - 0.10	1.00	1.00
>0.10 – 0.20	0.91	0.95
>0.20 – 0.30	0.82	0.91
>0.30 – 0.40	0.74	0.87
>0.40 – 0.50	0.67	0.84
>0.50 – 0.60	0.61	0.81
>0.60 – 0.70	0.56	0.78
>0.70 – 0.80	0.51	0.76
>0.80 – 0.90	0.47	0.75
>0.90 – 1.00	0.44	0.73

^a North oriented means within 45 degrees of true north.

R402.4.1.2 Testing; Add a last paragraph to read as follows:

Mandatory testing shall only be performed by individuals that are certified to perform air infiltration testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

C402.4.2 Minimum skylight fenestration area; add exception # 6 to read as follows:

6. Storm shelters complying with ICC 500.

C402.4.3 Maximum U-factor and SHGC; add exception to read as follows:

Exception: The maximum U-factor and solar heat gain coefficient (SHGC) for fenestration shall not be required in storm shelters complying with ICC 500.

R402.4.1.2 Testing; Add a last paragraph to read as follows:

Mandatory testing shall only be performed by individuals that are certified to perform duct testing leakage testing certified by national or state organizations as approved by the building official. The certified individuals must be an independent third-party entity, and may not be employed; or have any financial interest in the company that constructs the structure.

Section R402.4 (N1102.4) Air leakage (Mandatory); add section R402.4.1.3 and table R402.4.1.3 to read as follows:

R402.4.1.3 (N1102.4.1.3) Testing option – ACH tradeoff. As an option to the air leakage rate set out in Section R402.4.1.2 (N1102.4.1.2), 1- and 2-family homes meeting all of the listed criteria below and the *thermal envelope* requirements in Table R402.4.1.3 (N1102.4.1.3) will be considered compliant when tested and verified as having an air leakage rate to not less than or equal to four air changes per hour when tested and reported in accordance with the testing standards and reporting criteria listed in Section R402.4.1.2 (N1102.4.1.2).

The compliance equivalency is limited as follows:

1. Limited to a conditioned floor area between 1,000 and 6,000 square feet,
2. Limited to between 2 to 6 bedrooms,
3. Assumes all ductwork and mechanical equipment is located in the unconditioned attic,
4. Assumes typical wood framing in the walls and roof, and
5. Assumes one of the following heating/cooling systems:
 - a. All electric system with a heat pump for heating, or
 - b. A system with electric cooling and natural gas heating.

Dwellings using electric resistance strip heating do not qualify for this tradeoff.

TABLE R402.4.1.3 (N1102.4.1.3)^a

Envelope Component	Option #1	Option #2
R402.4 Air Leakage	≤ 4 ACH50	≤ 4 ACH50
Wall Insulation <i>R</i> -value	$R_{13} + R_3^b$	$R_{13} + R_3^b$
Fenestration <i>U</i> -factor	≤ 0.32	≤ 0.32
Fenestration SHGC	≤ 0.25	≤ 0.25
Ceiling <i>R</i> -value	$\geq R_{49}$	$\geq R_{49}$
Duct Insulation <i>R</i> -value	R8	R6
Radiant Barrier Required	No	Yes

^a Except for the values listed in the table, all other mandatory code provisions are applicable.

^b The first value listed is the *R*-value of cavity insulation, the second value is the *R*-value of the continuous insulation or insulated siding.

Section R402.4 Air leakage (Mandatory); add section R402.4.1.4 to read as follows:

R402.4.1.4 Testing options for R2 multifamily dwelling units. As an option to the air leakage rate set out in Section R402.4.1.2, multifamily dwelling units will be considered compliant when tested and verified as having an air leakage rate to the air leakage rate set out in either Section R402.4.1.4.1 or Section R402.4.1.4.2 when tested and reported in accordance with the testing standards and reporting criteria listed in Section R402.4.1.2

R402.4.1.4.1 Total air leakage rate for interior multifamily dwelling units. Interior multifamily dwelling units with a measured, “unguarded” total air leakage result of 5.3 ACH50 or less shall be considered compliant.

R402.4.1.4.2 Total air leakage rate for corner multifamily dwelling units. Corner multifamily units with a measured, “unguarded” total leakage result of less than 5.0 ACH50 shall be considered compliant.

Section R402.4 Air leakage (Mandatory); add section R402.4.1.5 to read as follows:

R402.4.1.5 Sampling options for R2 multifamily dwelling units. For buildings having three or more dwelling units, a minimum of 15% of the dwelling units in each building must be tested as required by Section R402.4.1.2. Prior to beginning sampling for testing, “Initial Testing” is required for each multifamily property. “Initial Testing” shall consist of the 3rd party testing contractor performing the required tests on at least three consecutive dwelling units. Test results from the “Initial Testing” must satisfy minimum code requirements before sampling is permitted. Dwelling units selected for the “Initial Testing” must be within the same building. Dwelling units selected for “Initial Testing” shall not be included in a “sample group” or counted toward the minimum 15% of dwelling units tested. The building official shall randomly select the three dwelling units for “Initial Testing.” The building official may delegate the random selection to the designated 3rd party testing contractor.

R402.4.1.5.1 Sample group Identification and Sampling. The builder shall identify a "sample group" which may be a building, floor, fire area or portion thereof. All of the dwelling units within the "sample group" must be at the same stage of construction and must be ready for testing. The building official shall randomly select at least 15% of dwelling units from each "sample group" for testing. The building official may delegate the random selection to the designated 3rd party testing contractor.

If each tested dwelling unit within a "sample group" meets the minimum code requirements, then all dwelling units in the "sample group" are considered to meet the minimum code requirements.

Before a building may be deemed compliant with the testing as required, each "sample group" must be deemed compliant with the minimum code requirements. The sum total of all of the tested dwelling units across all "sample groups" shall not be less than a minimum of 15% of the dwelling units in a building.

R402.4.1.5.2 Failure to Meet Code Requirement(s). If any dwelling units within the identified "sample group" fail to meet a code requirement as determined by testing, the builder will be directed to correct the cause(s) of failure, and 30% of the remaining dwelling units in the "sample group" will be randomly selected for testing by the building official, or third-party testing contractor, regarding the specific cause(s) of failure.

If any failures occur in the additional dwelling units, all remaining dwelling units in the sample group must be individually tested for code compliance.

A multifamily property with three failures within a 90-day period is no longer eligible to use the sampling protocol in that community or project until successfully repeating "Initial Testing." Sampling may be reinstated after at least three consecutive dwelling units are individually verified to meet all code requirements.

A Certificate of Occupancy may not be issued for any building until testing has been performed and deemed to satisfy the minimum code requirements on the dwelling unit(s) identified for testing.

Section R403.3 Ducts; add section R403.3.4.1 to read as follows:

R403.3.4.1 Sampling options for R2 multifamily dwelling units. For buildings having three or more dwelling units, a minimum of 15% of the dwelling units in each building must be tested as required by Section R403.3.3. Prior to beginning sampling for testing, "Initial Testing" is required for each multifamily property. "Initial Testing" shall consist of the 3rd party testing contractor performing the required tests on at least three consecutive dwelling units. Test results from the "Initial Testing" must satisfy minimum code requirements before sampling is permitted. Dwelling units selected for the "Initial Testing" must be within the same building. Dwelling units selected for "Initial Testing" shall not be included in a "sample group" or counted toward the minimum 15% of dwelling units tested. The building official shall randomly select the three dwelling units for "Initial Testing." The building official may delegate the random selection to the designated 3rd party testing contractor.

R403.3.4.1.1 Sample group Identification and Sampling. The builder shall identify a "sample group" which may be a building, floor, fire area or portion thereof. All of the dwelling units within the "sample group" must be at the same stage of construction and must be ready for testing. The building official shall randomly select at least 15% of dwelling units from each "sample group" for testing. The building official may delegate the random selection to the designated 3rd party testing contractor.

If each tested dwelling unit within a "sample group" meets the minimum code requirements, then all dwelling units in the "sample group" are considered to meet the minimum code requirements.

Before a building may be deemed compliant with the testing as required, each "sample group" must be deemed compliant with the minimum code requirements. The sum total of all of the tested dwelling units across all "sample groups" shall not be less than a minimum of 15% of the dwelling units in a building.

R403.3.4.1.2 Failure to Meet Code Requirement(s). If any dwelling units within the identified “sample group” fail to meet a code requirement as determined by testing, the builder will be directed to correct the cause(s) of failure, and 30% of the remaining dwelling units in the “sample group” will be randomly selected for testing by the building official, or third-party testing contractor, regarding the specific cause(s) of failure.

If any failures occur in the additional dwelling units, all remaining dwelling units in the sample group must be individually tested for code compliance.

A multifamily property with three failures within a 90-day period is no longer eligible to use the sampling protocol in that community or project until successfully repeating "Initial Testing." Sampling may be reinstated after at least three consecutive dwelling units are individually verified to meet all code requirements.

A Certificate of Occupancy may not be issued for any building until testing has been performed and deemed to satisfy the minimum code requirements on the dwelling unit(s) identified for testing.

Section C403.7.4 Energy recovery ventilation systems (Mandatory); add exception #12 to read as follows:

12. Individual ventilation systems that serve an individual dwelling unit or sleeping unit.

Section C403.11.1 Duct and Plenum Insulation and Sealing (Mandatory); is amended by adding a second paragraph to read as follows:

Environmental ducts and plenums installed in vertical chases, both supply and exhaust, where the ducts or plenums will not be accessible after construction completion, shall be leak tested in accordance with the SMACNA HVAC Air Leakage Test Manual to the installed ductwork class and pressure requirements.

Documentation shall be furnished demonstrating that representative sections totaling not less than 25 percent of the duct area have been tested and that all tested sections comply with the requirements of this section.

Section R404.1 (N1104.1); revised in its entirety to read as follows:

Section R404.1 (N1104.1) Lighting equipment (Mandatory). Not less than 75 percent of the lamps in permanently installed lighting fixtures or not less than 75 percent of the permanently installed lighting fixtures shall contain only high-efficacy lamps.

Section R405.2 (N1105.2); amend to read as follows:

Section 405.2 (N1105.2) Mandatory requirements. Compliance with the section requires that the mandatory provisions identified in Section 401.2 be met. Supply and return ducts not completely inside the building thermal envelope shall be insulated to an R-value of not less than R-6.

Exceptions:

1. For one and two family dwellings the maximum envelope leakage of 4 ACH50 is permitted provided the envelope leakage in the Standard Reference Design is 3 ACH50 and all other requirements of Section R405 are met, including all other mandatory measures. The annual energy cost or source energy usage of the Proposed Design must be equal to or less than that of the Standard Reference Design.
2. For multifamily or townhomes and buildings classified as Group R2 and Group R4 of three stories or less the maximum envelope leakage of less than 5 ACH50 is permitted provided the envelope leakage in the Standard Reference Design is 3 ACH50 and all other requirements of Section R405 are met, including all other mandatory measures. The annual energy cost or source energy usage of the Proposed Design must be equal to or less than that of the Standard Reference Design.

Section R405.6.2; add the following sentence to the end of paragraph:

Acceptable performance software simulation tools may include, but are not limited to, REM Rate™; Energy Gauge®; ICF International Beacon Residential; Ekotrope, HERS Module; Right-Energy HERS and IC3. Other performance software programs as listed by RESNET® and having the ability to provide a report as outlined in R405.4.2 may also be deemed acceptable performance simulation programs and may be considered by the building official.

Section C405.9. Voltage drop in feeders; deleted in its entirety.

Table R406.4 (N1106.4) Maximum Energy Rating Index; amend to read as follows:

**TABLE R406.4 (N1106.4) ¹
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	65

¹ This table is effective until August 31, 2019.

**TABLE R406.4 (N1106.4) ²
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	63

² The table is effective from September 1, 2019 to August 31, 2022.

**TABLE R406.4 (N1106.4) ³
MAXIMUM ENERGY RATING INDEX**

CLIMATE ZONE	ENERGY RATING INDEX
3	59

³ This table is effective on or after September 1, 2022.

Section C408.3.1 Functional Testing; amend to read as follows:

C408.3.1 Functional Testing. Prior to passing final inspection, the registered design professional or approved agency shall provide evidence that the lighting control systems have been tested to ensure that control hardware and software are calibrated, adjusted, programmed, and in proper working condition in accordance with the construction documents and manufacturer's instructions. Functional testing shall be in accordance with Sections C408.3.1.1 through C408.3.1.3 for the applicable control type.

DIVISION 10 PROPERTY MAINTENANCE CODE

Sec. 3.02.451 - International Property Maintenance Code amendments:

The International Property Maintenance Code is hereby adopted as it is written.

DIVISION 11 SWIMMING POOL AND SPA CODE

Sec. 3.02.501 - International Swimming Pool and Spa Code amendments:

The following noted portions of the International Swimming Pool and Spa Code are hereby amended to read as follows

Section 102.9 Other laws; amend to read as follows:

Section 102.9 Other laws. The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law, to include but not limited to:

1. Texas Department of State Health Services (TDSHS); Standards for Public Pools and Spas; §285.181 through §285.208, (TDSHS rules do not apply to pools serving one- and two family dwellings).
2. Texas Department of Licensing and Regulation (TDLR); 2012 Texas Accessibility Standards (TAS), TAS provide the scoping and technical requirements for accessibility for Swimming Pool, wading pools and spas and shall comply with 2012 TAS, Section 242. (TAS rules do not apply to pools serving one- and two family dwellings).

Exception: Elements regulated under Texas Department of Licensing and Regulation (TDLR) and built in accordance with TDLR approved plans, including any variances or waivers granted by the TDLR, shall be deemed to be in compliance with the requirements of this Chapter.

Section 103.1 Creation of enforcement agency; amend to read as follows:

Section 103.1 Creation of enforcement agency. The Building Inspections Department of the City of Celina is hereby created and the official in charge thereof shall be known as the *code official*. The Health Department of the City of Celina is hereby created and the official in charge thereof shall be known as the *code official* for operation and maintenance of any public swimming pool in accordance this code, local and state law.

Section 107.4 Violation penalties; Delete section entirely:

Section 107.5 Stop work orders; amend to read as follows:

107.5 Stop work orders. Upon notice from the code official, work on any system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be in violation of this code.

Section 202 definitions; create definition:

Health Department of City of Celina: The Health Department of the City of Celina shall regulate the operation of public pools. Routine inspections on pools and spas open to the public are conducted to document compliance with the standards set forth in State law.

Section 305.1 General; amend to read as follows:

Section 305.1 General The provisions of this section shall apply to the design of barriers for restricting entry into areas having pools and spas. In one-and two-family dwellings and townhouses, where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346 and swimming pools are equipped with a powered safety cover that complies with ASTM F1346, the areas where those spas, hot tubs or pools are located shall not be required to comply with Sections 305.2 through 305.7.

Section 305.2 Outdoor swimming pools and spas; amend to read as follows:

Section 305.2 Outdoor swimming pools and spas. All outdoor aquatic vessels and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2.1 through 305.7 and in accordance with the Texas Administrative Code, Texas Health and Safety Code 757 for public pools.

Section 305.2.7 Chain link dimensions; add section 305.2.7.1 to read as follows:

Section 305.2.7.1 Chain link fencing prohibited. Chain link fencing is not permitted as a barrier in public pools built after January 1, 1994.

Section 305.4 Structure wall as a barrier; amend to read as follows:

Section 305.4 Structure wall as a barrier. Where a wall of a one and two family dwelling or townhouse or its accessory structure serves as part of a barrier and where doors or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

1. Unchanged
2. Unchanged
3. Unchanged

The wall of a building with windows in accordance with 2018 International Building Code, Section 1030 in a Group R2 occupancies shall not be used as part of pool enclosure. Other windows that are part of a pool yard enclosure shall be permanently closed and unable to be opened for public pools.

Section 305.6 Natural barriers; amend to read as follows:

305.6 Natural barriers used in a one and two family dwelling or townhouse. In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge a minimum of eighteen (18) inches, a barrier is not required between the natural body of water shoreline and the pool or spa.

Section 307.1.4 Accessibility; add exception to read as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

Section 310.1 General; amend to read as follows:

310.1 General. Suction entrapment avoidance for aquatic vessels shall be provided in accordance with APSP 7 or for public swimming pools in accordance with State of Texas Rules for Public Swimming Pools and Spas, Title 25 TAC Chapter 265 Subchapter L, Rule §265.190 **[remainder unchanged]**

Section 313.7 Emergency shutoff switch; amend to read as follows:

313.7 Emergency shutoff switch for spas and hot tubs. A clearly labeled emergency shutoff or control switch for the purpose of stopping the motor(s) that provide power to the recirculation system and jet system shall be installed at a point readily accessible to the users and not less than 1.5 m (5 ft.) away, adjacent to, and within sight of the spa or hot tub. This requirement shall not apply to one and two family dwellings.

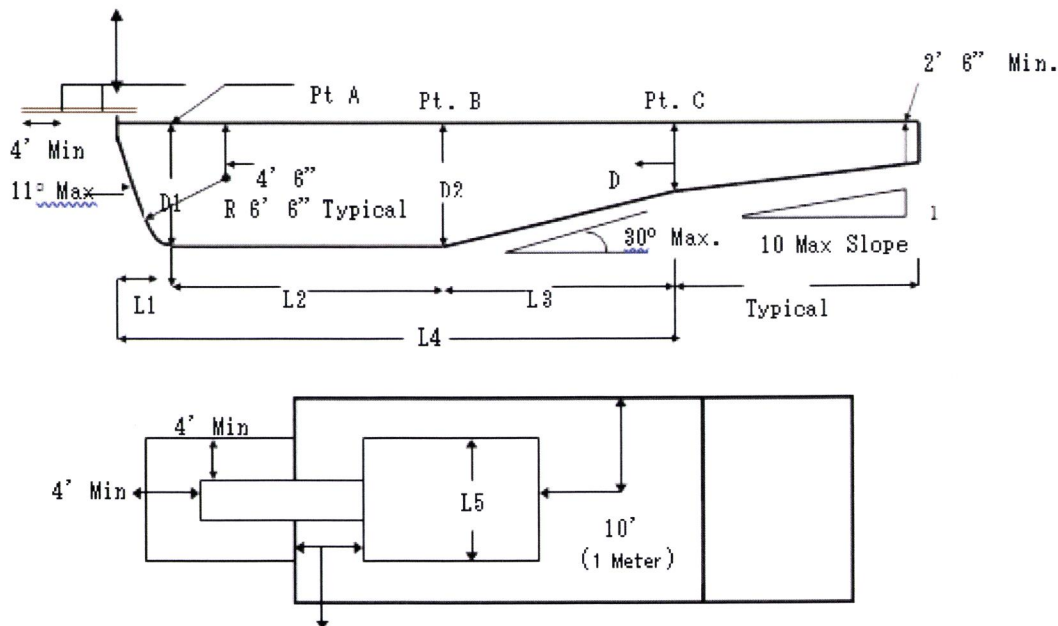
Section 402.12 Water envelopes; amend to read as follows:

Section 402.12 Water envelopes. The minimum diving water envelopes shall be in accordance with ~~Table 402.12~~ Texas department of State Health services, Administrative Code Title 25, Chapter 265, Section 186 (e) and Figure: 25 TAC 256.186 (e) (6). (~~Delete Table 402.12 and Figure 402.12~~)

: Figure: 25 TAC §265.186 (e) (6)

Maximum Diving Board Height Over Water	¾ Meter	1 Meter	3 Meters
Max. Diving Board Length	12 ft.	16 ft.	16 ft.
Minimum Diving Board Overhang	2 ft. 6 in.	5 ft.	5 ft.
D1 Minimum	8 ft. 6 in.	11 ft. 2 in.	12 ft. 2 in.
D2 Minimum	9 ft.	10 ft. 10 in.	11 ft. 10 in.
D3 Minimum	4 ft.	6 ft.	6 ft.
L1 Minimum	4 ft.	5 ft.	5 ft.
L2 Minimum	12 ft.	16 ft. 5 in.	19 ft. 9 in.
L3 Minimum	14 ft. 10 in.	13 ft. 2 in.	13 ft. 11 in.
L4 Minimum	30 ft. 10 in.	34 ft. 7 in.	38 ft. 8 in.
L5 Minimum	8 ft.	10 ft.	13 ft.
H Minimum	16 ft.	16 ft.	16 ft.
From Plumbet to Pool Wall at Side	9 ft.	10 ft.	11 ft. 6 in.
From Plumbet to Adjacent Plumbet	10 ft.	10 ft.	10 ft.

H (Overhead Obstruction or Ceiling)



(Reason: To avoid conflict with 25 TAC Chapter 265)

Section 402.13 Ladders for diving equipment: amend and delete exception to read as follows:

Section 402.13 Ladders for diving equipment. Ladders shall be provided with two grab rails or two handrails. There shall be a uniform distance between ladder treads with a, 7 inch (178 mm) minimum distance and 12 inch (305 mm) maximum distance. Supports, platforms, steps, and ladders for diving equipment shall be designed to carry the

anticipated loads. Steps and ladders shall be of corrosion-resistant material, easily cleanable and with slip-resistant tread;

Section 411.2.1 Tread dimensions and area & 411.2.2 Risers: amend to read as follows:

Section 411.2.1 Tread dimensions and area. Treads shall have a minimum unobstructed horizontal depth (i.e., horizontal run) of 12 inches and a minimum width of 20 inches.

Section 411.2.2 Risers. Risers for steps shall have a maximum uniform height of 10 inches, with the bottom riser height allowed to taper to zero.

Section 411.5.1 Swimouts & 411.5.2 Underwater seats and benches: amend to read as follows:

Section 411.5.1 Swimouts. Swimouts, located in either the deep or shallow area of a pool, shall comply with all of the following:

1. Unchanged
2. Unchanged
3. Unchanged
4. The leading edge shall be visibly set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface

Section 411.5.2 Underwater seats and benches. Underwater seats and benches, whether used alone or in conjunction with pool stairs, shall comply with all of the following:

1. Unchanged
2. Unchanged
3. Unchanged
4. Unchanged
5. The leading edge shall be visually set apart and provided with a horizontal solid or broken stripe at least 1 inch wide on the top surface along the front leading edge of each step. This stripe shall be plainly visible to persons on the pool deck. The stripe shall be a contrasting color to the background on which it is applied, and the color shall be permanent in nature and shall be a slip-resistant surface.
6. Unchanged
7. Unchanged

Section 603.2 Class D-2 pools: amend to read as follows:

Section 603.2 Class A and B pools: Class A and B pools over 5 feet deep: the transition point of the pool from the shallow area to the deep area of the pool shall be visually set apart with a 4-inch minimum width row of floor tile, a painted line, or similar means using a color contrasting with the bottom; and a rope and float line shall be provided between 1 foot and 2 feet on the shallow side of the 5-foot depth along and parallel to this depth from one side of the pool to the other side. The floats shall be spaced at not greater than 7-foot intervals; and the floats shall be secured so they will not slide or bunch up. The stretched float line shall be of sufficient size and strength to offer a good handhold and support loads normally imposed by users. If the owner or operator of the pool knows or should have known in the exercise of ordinary care that a rope or float is missing, broken, or defective, the problem shall be promptly remedied

Section 610.5.1 Uniform height of 9 inches: amend to read as follows:

610.5.1 Uniform height of 10 inches. Except for the bottom riser, risers at the centerline shall have a maximum uniform height of 10 inches (229 254 mm). The bottom riser height shall be permitted to vary from the other risers.

Section 804 Diving Water Envelopes: amend to read as follows:

Section 804.1 General. The minimum diving water envelopes shall be in accordance with Table 804.1 and Figure 804.1, or the manufacturer's specifications, whichever is greater. Negative construction tolerances shall not be applied to the dimensions of the minimum diving water envelopes given in Table 804.1.

DIVISION 12 EXISTING BUILDING CODE

Sec. 3.02.551 - International Existing Building Code amendments:

The following noted portions of the International Existing Building Code are hereby amended to read as follows

Section 102.4 Referenced codes and standards; amend to read as follows:

Section 102.4 Referenced codes and standards. The codes, when specifically adopted, and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections 102.4.1 and 102.4.2.

Section 202 Definitions; amend definition of Existing Building and Existing Structures to read as follows:

Existing Building - A building, structure, or space, with an approved final inspection issued under a code edition which is at least 2 published code editions preceding the currently adopted building code; or a change of occupancy.

Existing Structure- A building, structure, or space, with an approved final inspection issued under a code edition which is at least 2 published code editions preceding the currently adopted building code; or a change of occupancy.

Section 305.1; adds an exception to read as follows:

Exception: Components of projects regulated by and registered with Architectural Barriers Division of Texas Department of Licensing and Regulation shall be deemed to be in compliance with the requirements of this chapter.

Section 305.4.2; add Number 7 to the list of requirements as follows:

7. At least one accessible family or assisted use toilet room shall be provided in accordance with Chapter 11 of the International Building Code.

Section 401.3 Flood Hazard Areas; delete this section:

Section 405.1.3 New fire escapes; delete entire section:

Section 405.2.5 Flood Hazard Areas; delete this section:

Section 406.1; amend to read as follows:

406.1 Material. Existing electrical wiring and equipment undergoing *repair* shall be allowed to be repaired or replaced with like material, in accordance with the requirements of NFPA 70.

Section 502.3 Flood hazard areas; delete entire section:

Section 504.1.2; amend to read as follows:

504.1.2 Existing fire escapes. Existing fire escapes shall continue to be accepted as a component in the means of egress in existing buildings only. Existing fire escapes shall be permitted to be repaired or replaced.

Section 504.1.3; delete entire section:

Section 507.3 Flood hazard areas; delete entire section:

Section 701.3 Flood Hazard Areas; delete entire section:

Section 702.6 Material and methods; amend to read as follows:

Section 702.6 Materials and methods. All new work shall comply with the materials and methods requirements in the *International Building Code*, *International Energy Conservation Code*, *International Mechanical Code*, National Electrical Code, and *International Plumbing Code*, as applicable, that specify material standards, detail of installation and connection, joints, penetrations, and continuity of any element, component, or system in the building.

Section 802.5.1 Minimum requirement; amend to read as follows:

Section 802.5.1 Minimum requirement. Every portion of open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps and landings that are not provided with guards, or those in which the existing guards are judged to be in danger of collapsing, shall be provided with guards.

Section 803.1 Scope; add sentence to end of paragraph to read as follows:

For the purpose of fire sprinkler protection and fire alarm requirements included in this section, the work area shall be extended to include at least the entire tenant space or spaces bounded by walls capable of resisting the passage of smoke containing the subject work area, and if the work area includes a corridor, hallway, or other exit access, then such corridor, hallway, or other exit access shall be protected in its entirety on that particular floor level.

Section 803.2.4; amend exception to read as follows:

Exception: Supervision is not required where the Fire Code does not require such for new construction.

Section 803.3 Standpipes; amend section to read as follows:

803.3 Standpipes. Refer to Section 1103.6 of the Fire Code for retroactive standpipe requirements. ~~{Delete rest of Section 803.3.}~~

Section 805.2 General; Remove Exception #1

Exception 1. ~~Where the work area and the means of egress serving it complies with NFPA101.~~

Exception 2. 1.

Section 805.3.1.1 Single exit buildings; delete #4

~~4. In Group R-4 Occupancies, the maximum occupant load excluding staff is 16.~~

Section 805.3.1.2 Fire escapes required; amend to read as follows:

805.3.1.2 Fire Escapes required. For other than Group I-2, where more than one exit is required an existing fire escape complying with section 805.3.1.2.1, shall be accepted as providing one of the required means of egress.

Section 805.3.1.2.1 Fire escape access and detail; delete # 3 and amend to read as follows:

805.3.1.2.1 Fire Escape access and details.

1. Unchanged

2. Unchanged

3. Delete whole section

4. 3. Unchanged #4 now #3

5. 4. In all building of Group E occupancy up to and including the 12th grade, building of Group I occupancy, boarding houses, and childcare centers, ladders of any type are prohibited on fire escapes used as a required means of egress.

Section 805.5.2 Transoms; add sentence at beginning of paragraph to read as follows:

In all buildings of Group B, E, [Remainder unchanged]

Section 904.1 Automatic sprinkler systems; add sentence to read as follows:

For the purpose of fire sprinkler protection and fire alarm requirements included in this section, the work area shall be extended to include at least the entire tenant space or spaces bounded by walls containing the subject work area, and if the work area includes a corridor, hallway, or other exit access, then such corridor, hallway, or other exit access shall be protected in its entirety on that particular floor level.

Section 904.1.1 High-rise buildings; amend sentence to read as follows:

904.1.1 High-rise buildings. An automatic sprinkler system shall be provided in work areas of high-rise buildings.

Section 1103.3 Flood hazard areas; delete entire section

Section 1106 Storm Shelters; Delete entire section storm shelters are only required for new buildings:

Section 1201.4 Flood hazard areas; delete entire section

Section 1301.3.2 Compliance with other codes; amend to read as follows:

1301.3.2 Compliance with other codes. Buildings that are evaluated in accordance with this section shall comply with the International Fire Code.

Section 1301.3.3 Compliance with Flood Hazard Provisions; delete this section:

Section 1402.6 Flood Hazard Areas; delete this section

DIVISION 13 STORM SHELTER CODE

Section 3.02.601 ICC/NSSA 500-2014 (referenced by the 2018 IBC and 2018 IRC)

Amendments

The following noted portions of the International Code Council - National Storm Shelter Association 500 are hereby amended to read as follows

SECTION 106 Inspections and structural observations; amend as follows:

106.2 Special inspections. Special inspections shall be provided for construction and installation of materials as required by the authority having jurisdiction in accordance with the applicable building code and Section 106.3 of this standard. It shall be permitted for one statement of special inspections to apply to both host and shelter construction.

Exception: Special inspections and tests are not required for storm shelter construction of a minor nature or as warranted by conditions in the jurisdiction as approved by the building official.

SECTION 202 Definitions; amend as follows:

CRITICAL SUPPORT SYSTEMS. Structures, systems and components required to ensure the health, safety and well-being of occupants. Critical support systems include, but are not limited to, potable and waste water systems, electrical power systems, life safety systems and ~~HVAC~~ ventilation systems.

SECTION 306 Component design and testing; amend as follows

306.4.1. Impact-protective systems in tornado shelters. Impact-protective systems in tornado shelters shall be permanently affixed. All operable impact-protective systems shall be ~~manually~~ operable from inside the shelter.

SECTION 309 Penetrations of storm shelters envelope by systems and utilities; amend as follows:

309.1 Penetration of storm shelter envelope by mechanical, electrical and plumbing systems. Penetrations through the storm shelter envelope of mechanical, electrical and plumbing systems, including piping and utility lines, larger than 3 ½ square inches (2258 mm²) in area for rectangular penetrations or 2 ½ ~~1/16~~ inches (~~52.38~~ 63.5 mm) in diameter, shall be considered openings and shall be protected in accordance with Section 306.3. Penetrations of the storm shelter envelope shall not degrade the structural integrity of the storm shelter and missile impact resistance of the storm shelter envelope.

SECTION 402 Hazardous materials; delete entire section:

SECTION 504 Signage for community shelters; amend to read as follows:

504.1.2.1 Location of identifying sign. The identifying sign shall be posted in a prominent location 60 inches maximum above the finished floor, measured from the baseline of the highest tactile character.

SECTION 601 Fire-Resistant Construction; amend to read as follows:

601.1 Fire separation. ~~Fire barriers and horizontal assemblies separating spaces or areas designated as storm shelters from other building areas shall have a minimum fire-resistance rating of 2 hours and shall be constructed in accordance with the applicable building code.~~ Walls or horizontal assemblies between storm shelters and other building areas shall be fire barriers or horizontal assemblies with a minimum fire-resistance rating of 2 hours constructed in accordance with the applicable building code.

Exception: Fire separation assemblies are not required for residential shelters.

CHAPTER 7: Shelter Essential Features and Accessories; add exception and section 702.2.5 to read as follows:

SECTION 701 GENERAL

701.1 Protection of critical support systems. Critical support systems shall remain functional for the design storm event and minimum period of shelter occupancy (24 hours for hurricane shelters, 2 hours for tornado shelters). Critical support systems located outside of the storm shelter areas shall be protected by a means that meets the wind pressure and missile impact requirements of Chapter 3, and, as applicable, the flood-resistance requirements of Chapter 4.

Exception: The requirements of this section shall not apply to automatic sprinkler systems and fire alarm systems.

SECTION 702 TORNADO SHELTERS

702.2.5 Water supply and storage. The capacity of plumbing and waste disposal systems to supply potable water and contain or dispose of waste water or solid wastes shall be determined in accordance with Table 702.2.5.

<u>Table 702.2.5</u> <u>WATER SUPPLY AND WASTE WATER STORAGE</u> <u>TORNADO SHELTERS</u>		
<u>STORM SHELTER TYPE</u>	<u>POTABLE WATER</u>	<u>WASTE WATER</u>
<u>Residential, one- and two-family dwellings</u>	<u>Not Required</u>	<u>Not Required</u>
<u>Residential, other</u>	<u>Not Required</u>	<u>Not Required</u>
<u>Community (<= 50 occupants)</u>	<u>Not Required</u>	<u>Not Required</u>
<u>Community (> 50 occupants)</u>	<u>1/12 gallon per occupant</u>	<u>1/8 gallon per occupant</u>

SECTION 4

CUMULATIVE REPEALER CLAUSE

This Ordinance shall be cumulative of all other Ordinances and shall not repeal any of the provisions of such Ordinances except for those instances where there are direct conflicts with the provisions of this Ordinance. Ordinances, or parts thereof, in force at the time this Ordinance shall take effect and that are inconsistent with this Ordinance are hereby repealed to the extent that they are inconsistent with this Ordinance. Provided however, that any complaint, action, claim or lawsuit which has been initiated or has arisen under or pursuant to such other Ordinances on this date of adoption of this Ordinance shall continue to be governed by the provisions of such Ordinance and for that purpose the Ordinance shall remain in full force and effect.

SECTION 5

SAVINGS CLAUSE

All rights and remedies of the City of Celina, Texas are expressly saved as to any and all violations of the provisions of any other ordinance affecting zoning which have secured at the time of the effective date of this ordinance; and, as to such accrued violations and all pending litigation, both civil and criminal, whether pending in court or not, under such ordinances same shall not be affected by this Ordinance but may be prosecuted until final disposition by the court.

SECTION 6

SEVERABILITY

The provisions of the Ordinance are severable. However, in the event this Ordinance or any procedure provided in this Ordinance becomes unlawful, or is declared or determined by a judicial, administrative or legislative authority exercising its jurisdiction to be excessive, unenforceable, void, illegal or otherwise inapplicable, in whole or in part, the remaining and lawful provisions shall be of full force and effect and the City shall promptly promulgate new revised provisions in compliance with the authority's decisions or enactment.

SECTION 7

PENALTY

Any person, firm or corporation violating any of the provisions or terms of this ordinance or of the Code of Ordinances as amended hereby, shall be subject to the same penalty as provided for in the Code of Ordinances of the City of Celina, and upon conviction shall be punished by a fine not to exceed Two Thousand Dollars (\$2,000) for each offense, and a separate offense shall be deemed committed upon each day during or on which a violation occurs and continues.

If the governing body of the City of Celina determines that a violation of this Ordinance has occurred, the City of Celina may bring suit in district court to enjoin the person, firm, partnership, corporation, or association from engaging in the prohibited activity.

SECTION 8

PUBLICATION CLAUSE

The City Secretary of the City of Celina is hereby directed to publish in the Official Newspaper of the City of Celina the Caption, and Effective Date Clause of this Ordinance as required by Section 52.013 of the Local Government Code.

SECTION 9

ENGROSSMENT AND ENROLLMENT

The City Secretary is hereby directed to engross and enroll this Ordinance by copying the descriptive Caption in the minutes of the City Council and by filing this Ordinance in the Ordinance records of the City.

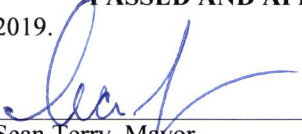
SECTION 10

EFFECTIVE DATE

This Ordinance shall become effective from and after its date of passage in accordance with law.

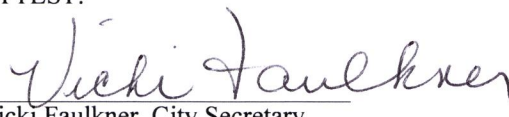
AND IT IS SO ORDAINED.

PASSED AND APPROVED by the City Council of the City of Celina, Texas this 19 day of March, 2019.



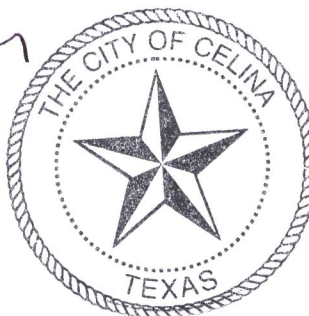
Sean Terry, Mayor
City of Celina, Texas

ATTEST:

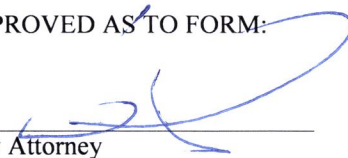


Vicki Faulkner, City Secretary
City of Celina, Texas

[SEAL]



APPROVED AS TO FORM:



City Attorney
City of Celina, Texas